Large One Term Project CM3203 (40 Credits)

Web portal for fashion designers providing mainstream web services

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Abstract

The aim of this project is to design and develop a web portal for fashion employees and fashion customers. The web portal will help international fashion employees, particularly fashion designers, photographers, tailors and models, to introduce themselves and to have an opportunity to collaborate with each other, and the portal will also offer them a blog page where they can share and update their personal journal or diary. The web portal will crowd source fashion news, events, designers' collections and videos, and it will also direct users to online shops. Advanced internet technologies will be used to develop a fully functional web portal that is designed to work well on all screens and devices.

Acknowledgments

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1. Introduction

The purpose of writing this report is to explain in more detail each stage of the project to develop a fashion web portal for different users in the fashion industry, the main group of which will include fashion designers, photographers, tailors and models; the web portal will offer different functionality for fashion customers. Therefore, the report will focus on defining each feature the system offers and on how I can achieve the project's aim.

The first stage of developing the project is defining the users and their needs in more detail and to find out the features fashion users want to have in the web portal. Therefore, I have created an online survey using Google Drive and spread this questionnaire throughout the main groups of users to learn their needs. I analyse their needs in more detail later in the report; however, I have specified the user requirements as functional and non-functional requirements where they could help in implementation.

The second stage of developing the project is designing the use cases and class diagrams that help to define the system interactions and class in more detail. Furthermore, I have designed a user interface prototype and tested it with two different users to identify design problems that can be avoided during implementation. Furthermore, I have outlined the test cases to test system functionality when development is done.

The third stage is to define the implementation, indicating what kind of framework I used and what kind of problems I faced in implementing the web portal.

The fourth stage is to test and evaluate the system using test cases.

Finally, after completing the four distinct stages, future work will be determined.

2. Background

Fashion interest is widespread among people due to the influence of social networks. When popular looks and clothes change, people want to be part of the latest fashion trends. In the past, people often just wore what they wanted to wear without changing their looks. But now, thanks to social networking, fashion designers and fashion bloggers have a significant influence on people, enabling individuals to see people from different countries and cultures wearing the same clothes and having the same styles (Mohr 2015). Thanks to social networking, fashion is everywhere these days. Thus, fashion industries seek to develop different fashion websites and web portals to introduce their products or designs. By accessing Google and writing in the search bar "fashion portal," one could find many fashion portals that offer fashion followers the latest fashion news and designers' collections. When beginning this project, I had browsed different fashion web portals to determine what kind of features this project should offer and how the project could be unique. I considered three different fashion web portals, examining the web designs, features and functionality, as well as what kind of people use the web portals.

The first fashion portal reviewed was FashionNet, where users browse everything in the fashion world, including famous designers, models, fashion photography and other kinds of fashion magazines and blogs (Fashion.net 2015). The second fashion web portal was European Fashion, which is for browsing the designers' collections, and there is also a blog feature for reading European fashion articles and an event page that shows upcoming fashion exhibition and conferences (Europeanafashion.eu 2015). The last fashion web portal was Creative Portal, and this site enables users to browse the latest designers, fashion photography and models from London fashion week (Creativeportal.org.uk 2015).

Consequently, the reason for choosing a web portal is because the web portal system provides different functions and features to specific and identified users, and it provides them with an easy, personalised, intuitive and user-customisable web

interface for facilitating access to information and services that are of primary relevance to the users (Its.hku.hk 2015). I had to offer different features than those three fashion web portals, and I decided to introduce some social media website features. The other existing fashion web portals focus on the fashion designers, photographers and models without giving the fashion employees an opportunity to introduce themselves, nor does any one web portal gather everything in fashion, for instance fashion news, events, fashion collections, blogs, introducing users, comment features, and online shopping websites. Therefore, I had a set group of users to focus on while implementing this web portal, and the users are fashion designers, photographers, models and tailors. The features and functionality achieved for the main groups of users in developing the web portal will be similar to a user profile page in Facebook or other kinds of social media, where users register and login to a web portal and have their own profile pages where they can add profile photos, personal details and contact information, while also interacting with other users by posting their fashion experiences and uploading photos related to their work. Furthermore, my web portal would let the main users write articles and personal journal entries on the blog page and even apply for a new career by submitting their CV's. Those are the main functionalities the project looks to implement that the other three fashion web portals do not offer. And this project will seek to have everything in one fashion portal, displaying all fashion news, events and designers' collections, while also gathering all kinds of online clothing shops fashion customers. Web portal requirement and design will be more specified in the following sections.

3. Requirements Analysis

3.1. Identifying Users – Personas

I have defined various types of users by using personas in order to centralize and fully clarify the audience for the system, which should focus on their needs. The personas are fictional characters that are used to specify their needs from the system. To define this requirement, I have interviewed some users to address their needs.

Mariam – Designer:

She says:

'I want a web portal that links together designers, photographers and models'. 'I want to have something like a profile page where I could write about my design experience and provide models, tailors, photographers and other designers with my email or contact number and other information'. 'I need to easily find a tailor to collaborate with for dressmaking'.

'Keep people up-to-date with my news and collection'.

'I would like people to know my news and it would be great if I could know other designers' news'.

'I want people to easily know my event date and location'.

'It would be great if people could comment on my collection so I can know their opinions'.

Her needs:

A fashion web portal that has these kinds of services:

Profile page;

Contact other users;

Event page;

News;

Blog;

Other interesting functions.



Mariam is a 27-year-old Qatari designer. She loves fashion and she has just started designing her first collection maternity clothing under the brand name NineMonths. Mariam is a beginner designer. She has finished sketching the collection but she is looking for a tailor, model and photographer to start putting these sketches into real life. She has had difficulty searching professional tailor, and she has just started thinking about contacting a qualified photographer and model. However, she could not find this information easily on social media or in any kind of website.

Jameela - Tailor:

She says:

'I don't have good experience with social networking, and I was asking if there is a web portal for fashion needs'.

Her needs:

A web portal that helps her to collaborate with designers.

Tailors that could easily apply for jobs and distribute their CVs to designers.



Jameela is from the Philippines and is 35 years old. She is working in one of the tailoring stores in Cardiff. She wants the store to be more popular and she wants to collaborate with a designer to make his or her collection. However, she is having some difficulty contacting a designer, and she is looking for a fashion portal that has different services.

Michael - Photographer:

He says:

'I have never used any kind of social network to contact a designer or model to work with, but I know it would be easier to get an opportunity to work with international designers and models. So I am looking for a web portal that offers a kind of gathering of all fashion's main workers like designers, models, tailors and for sure photographers'.

'As I am a fashion photographer, I would like to see my photo shoots in a gallery page'.

His needs:

Communication with designers and models.

Provide people and designers with his photo shoots.



Michael is 33 years old and has been a photographer since the age of 20. He loves shooting photos. He started shooting landscape photos until the age of 25, and then he decided to start shooting portrait photos. Some beginner designers started to ask him to do a photo shoot session for their collection, and from there, he became a fashion photographer. He would love to see a web portal that provides different services.

Hala – Model:

She says:

'I'm using Instagram to show myself as a model, and I am looking for a fashion web portal that would help me to collaborate with designers and photographers, as I have found it very difficult to find a designer or photographer to collaborate with'.

'I need to be more updated with the upcoming fashion events'.

'Keep up-to-date with the latest designers' collections'.

Her needs:

A fashion web portal to get in touch with designers and photographers.

Events

Looking at designers' collections.



Hala a 20 years old Brazilian girl lives in Qatar, currently studying business in Qatar university. She loves fashion and at this time she is working as a model for two Qatari designers as a part time job. What makes Hala more known in Qatar is the social media in particular Instagram. She is looking for another web portal to help her to contact and found out the designers more easily.

Lily – fashion customer:

She says:

'I really love fashion and I think every girl loves fashion'.

'As you know, I am a business information system student and I can look at fashion from the business side and from the technological side and how could that be improved and developed. I love to see fashion in social networks, and I like those websites that have many features for fashion designers and fashion customers. There are few websites that provide many different and interesting features'.

'So I love to read fashion news and I am usually up-to-date with the latest collections from different brands'.
'I am a shopaholic and I love to shop online'.

Her needs:

Being up-to-date with fashion news, events and designers' collections. Having a page that provides her with different online shopping services.

Lily, a 22-year-old business information system student at Cardiff Metropolitan University, is a fashion lover and a shopaholic.

3.2 Defining the Requirements

In order to define the requirements, I have created an online survey using Google Drive. It will be distributed to the four groups of the main users of the web fashion portal: designers, photographers, tailors and models. Therefore, the online survey link has been given to the four groups of users by sending them an email. I obtained their email addresses from one of the popular mobile applications, Instagram. The reason for using Instagram is because I am interested in using it, and it is a popular social network service. It is an application used on mobile phones, for instance iPhones and Android phones. The purpose of this application is to share photos and videos and people can comment and like the photos and videos. Recently, Instagram has had a great impact on the fashion industry and customers. Instagram helps the fashion industry to interact with customers, and this increases their awareness, involvement, and engagement. I have noticed that many designers, photographers, models and tailors have Instagram accounts. They use Instagram as a facility to introduce their business and to get more interest. For example, one of the designers is using Instagram to display his collection. He is providing people with his contact details and brand information, so if they like a dress from his collection, they could easily contact him using the provided number or email address. Therefore, I searched Instagram to find international designers, tailors, photographers and models to contact. I provided them with a link to get a response. I found a total of 25 users, and I contacted them through a direct message on Instagram. I sent them a message that contained the survey link. The total number of responses was 14, which comprised six designers, six photographers, one tailor and one model. The users' results will be more specified by explaining the following table:

3.2.1 Questions:

What type of user are you?

- o Designer
- o Tailor
- o Photographer
- Model

What kind of services would you like to have in the web portal? (You can choose more than one answer).

- o Create your own profile to add your personal details and your experience.
- o A web page for the latest fashion news and events.
- o Blog
- Communicate with the public, for example, people can comment on your profile news, and collection.
- o Having a gallery page that shows images and videos for the latest collections.
- o Others:

Table 2: Results

Requirements:		User Profile Page	Events Page	News Page	Gallery Page	Blog	Communicate with the public	Others:
N. I. C	Designers:	5	5	5	5	2	3	E-commerce
Number of users that require each requirement:	Tailors:	1						Having a directory for manufactures
requirement.	Models:		1	1	1		1	
	Photographers:	2			6		4	

3.2.2 Description of Results:

We can figure out from Table 2:

Designers: Nearly all the designers required a user profile page in the web portal to post their personal details and design experience for other users. Therefore, two of the designers need to have a blog page to post their articles and other interesting information. Furthermore, three of the designers required one kind of communication feature in the web portal, so public users or fashion customers could, for example, comment on the designer's blog page. Moreover, one of the designers suggested having another feature, an e-commerce page.

Tailors: one tailor responded to the questionnaire, and the feature that he wanted to see in the web portal was creating his own post by defining his personal details and experience in tailoring. He also suggested having another feature, a directory of manufactures.

Models: we had one response from a model. She required the following features in the fashion web portal: event page, gallery page, news page and communication with the public.

Photographers: the number of photographers who responded was six. As they are photographers, they all required a gallery feature in the fashion web portal to display their photo shoots of the designers' collections. They also required a feature to create posts on their user profile page. In addition, four of them wanted to have a feature to communicate with the public.

Finally, distributing this survey was very useful for knowing what the four groups of users would like to have in the fashion web portal.

3.3 Requirement Specification

To be more specific, the features were classified as either 'must have' or 'should have' in the system. Thus, they were distinguished as functional requirements or non-functional requirements.

3.3.1 Functional Requirements:

Essential Requirements ("Must Have")

- <u>Login feature</u>: The four groups of users must be able to register and login using their username, password and occupation.
- Home page: The home page must have a navigation bar to define each page, such as designers, photographers, models, tailors, gallery, news, events, shop and jobs.
- <u>User profile page</u>: The four user groups must be able to create their own profiles on the web portal by adding images, brief descriptions and contact details. They must be able to update and delete their posts. In addition, they would be able to create an entry to the blog from the profile page.
- <u>Designers' page</u>: The purpose of having a designer page in the web portal is to display posts that each designer created in his or her profile page. From this

- page, other users are able to see the designers' information and contact them by email or phone.
- <u>Tailors' page:</u> This page on the web portal will display the tailors' posts and other groups of users can know the tailors and contact them for any kind of business enquires.
- <u>Photographers' page:</u> This is where photographers and other groups of users would be able to display the photographers' posts.
- Models' page: The models' page is for displaying models' posts, and other users can view the page to contact them.
- Gallery page: The gallery page has an images page for the latest fashion pictures from the red carpet, front rows, fashion shows and the catwalk. In addition, there is a videos page for the latest behind-the-scenes snippets of the fashion shows and interviews.
- Events page: On the events page, users can view upcoming events and information about previous events, for example, London Fashion Week 2014.
- News page: In the news page, users should have a list of fashion news.
- <u>Blog:</u> The four groups of users must be able to create posts on the blog page.
- <u>Job page:</u> If any user wants to apply for a job in the fashion industry, for example modelling or photography, they must be able to submit their CVs on this page by uploading a file.
- Shop page: Having this feature is for public users and for the main groups of users to easily be directed to different online clothing shops.

Desirable Requirements ("Should Have")

- <u>Comment feature:</u> Public users should be able to comment on the main groups of users' articles or posts on the blog page.
- Email feature: One of the features that should be on the user profile page is their email address. The email address should be visible on each user post. For example, if the designer wants to contact a tailor, the designer could access the tailors' page and choose one of the tailors, and contact them by clicking on the email.

Requirements Subject to Time Constraints ("Could Have")

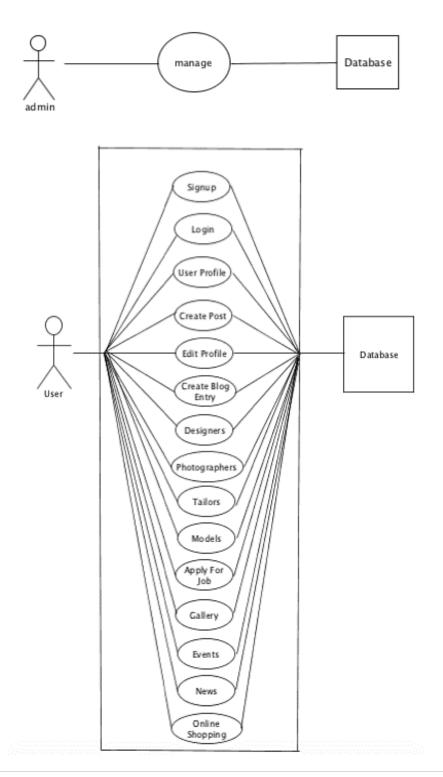
- <u>Chat features:</u> Could have a chatroom or a chat feature for the four groups of users to collaborate with each other.
- <u>Calendar for users:</u> Could have a calendar feature for highlighting each event on the calendar, as well as for each user to share their schedule with other users.
- <u>Like and vote on the gallery page</u>: Public users could like and vote on the collection that they like the most.

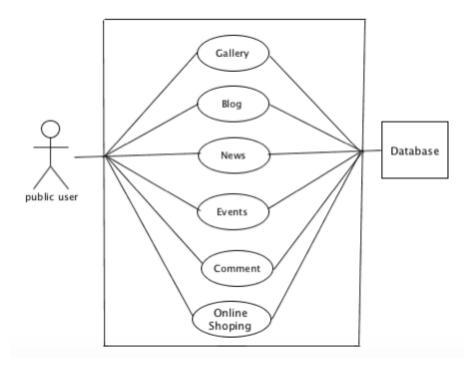
Non-functional Requirements (system properties)

- <u>Security</u>: User information must be protected by secured login. Only
 registered users are allowed to post information on their profiles; each must be
 associated with a single user.
- <u>Usability:</u> A well-defined website where users can access information with ease.

4. Specification and Design

4.1 UML – Use Case Diagrams





4.1.2 Actors and Components of the System:

4.1.2.1 Admin:

The purpose of the administrator in the system is to make sure that the website is running smoothly. The administrator conducts the following tasks: manages the system by uploading, updating and deleting images and videos on the gallery page; updates fashion news; collects all CVs that have been uploaded on the website database; and installs fashion e-commerce on the shop page.

4.1.2.2 Users:

Users are defined as designers, models, tailors and photographers. Users are able to login to the website using their username and password. They are able to create, edit and delete posts, as well as edit their profile and create blog entries.

4.1.2.3 Public Users:

Public users are fashion customers or fashion followers. They are able to browse the web portal and add comments on the blog page.

4.1.2.4 Database:

The database system consists of three tables, including the authentication and authorization table, which stores user register and login details. The administrator is able to delete users. There is also a fashion portal profiles table to store the events, gallery, jobs, news and shops entries. The administrator can add and update each page's requirements and the blog table that stores blog entries

4.1.3 User Case Descriptions

4.1.3.1 *Manage:*

The admin is responsible for managing, updating and deleting data from the database, so that users can view them on the website and find new data.

Basic Flow:

- Upload images in the gallery profile
- Delete galley images
- Add news, each news entry must specify the title, body text and upload an image
- Delete news
- Add the fashion events by specifying the event title, description, date, address and image
- Delete event
- Add new store link in the shop page by specifying the store name, website link and store image
- Delete store entry
- Add a new job on the job page
- Create and delete a blog entry

4.1.3.2 Signup:

If the user does not have an account on the website, he or she needs to create an account by signing up to the website to successfully log in.

- 1. User will need to specify their first and last name
- 2. User will need to specify a username
- 3. User required to specify their email address
- 4. User specifies new password
- 5. User enters their password again for confirmation
- 6. User required to specify their occupation type, for example, if the user is a designer, he or she must choose 'designer' from the list of occupations
- 7. User clicks on the signup button to be successfully registered

The system fails to register the user if he or she chooses a username that already exists in the system; therefore, the user will be asked to choose another username.

4.1.3.3 Login:

To proceed to this step, the user should be registered. After that, the user is able to login easily using their username and password and start using the web portal.

Basic Flow:

- 1. User must enter their username and password to login
- 2. User login correctly
- 3. User taken to the home page

Alternative flow:

- 1. If the user enters an incorrect detail, an error message will appear.
- 2. If the user forgot their password, they will need to reset the password.
- 3. Click on reset your password.
- 4. The user will be taken to another page, and will be asked to enter their email address.
- 5. New password will be sent to their email.

4.1.3.4 User Profile Page:

The user profile page is only for users who login to the web portal, and those users are designers, photographers, tailors and models. The profile page contains everything the user wants to do on the web portal: create posts, edit profile details and create blog entries.

- 1. User login.
- 2. User selects user profile page.
- 3. From this page, the user will need to click on 'edit profile' to add their personal details.
- 4. User profile details saved on the database.

- 5. If the user wants to create a new post, they will need to click on 'create post'.
- 6. If the user creates their post successfully, the post will be saved on the database. From the database, the post will be shown on the profile page and the page that belongs to his or her occupation. For example, if the user signs up as a model and accesses the profile page to create posts and add personal details, those details and posts will be shown on the model page. The same process occurs for tailors, designers and photographers.

4.1.3.5 Create a Post:

Creating a post is an option in the user-profile page to define user experiences in the fashion sector. For instance, if I am a photographer and I want other users to know about my experience in fashion photo shooting, I will need to click on 'create post' and write a brief description about my experience. Therefore, the post will be shown on the photographers' page where other users can read it and know more about me.

Basic Flow:

- 1. User will need to enter the user-profile page.
- 2. User needs to click on 'create post'.
- 3. User will be asked to enter a description and upload a photo that relates to his or her job.
- 4. User uploads photo.
- 5. Click on 'post' to successfully create.
- 6. The post is saved on the database.
- 7. The database sends the post back to the web portal.
- 8. The post is shown on the user-profile page and user page.

Alternative flow:

- 1. If users want to edit posts, they should go to their profile page and click on 'edit post'.
- 2. If users want to delete posts, they will be able to delete them by clicking on the 'delete' button on the profile page.

4.1.3.6 Edit Profile:

Edit profile is for users to add their personal details.

Basic Flow:

- 1. User accesses the user profile page.
- 2. Click on 'edit profile'.
- 3. From edit profile, the user will be required to specify date of birth.
- 4. User specifies brand name.
- 5. User specifies phone number.
- 6. User specifies location.
- 7. User will be able to add a profile photo.
- 8. The profile will specify user first name, last name, email address and occupation.

Alternative flow:

User can edit the profile and change the profile requirements.

4.1.3.7 Create Blog Entry:

Blog entry is where users are able to write whatever they want.

Basic Flow:

- 1. User accesses the user profile page.
- 2. User clicks on 'create blog entry'.
- 3. From the create blog entry, the user specifies blog headline, body text.
- 4. User will be able to add an image to the blog post.
- 5. User's post saved on the database and sent back to be displayed on the blog page.

Alternative flow:

Admin are able to delete the post from the database.

4.1.3.8 Designers:

On the designers' page, all designers' posts will be displayed. Each post contains a user experience description and image, which have been created from 'create post' on the user profile page. It also presents designers' personal details.

Basic Flow:

- 1. After the designer creates a post and edits the profile, the details will be saved on the database.
- 2. The database sends the designer's post back to the designer's page.

Alternative flow:

Users are able to delete and edit posts from their profile page.

4.1.3.9 Photographers:

In the web portal, there is a page that belongs to the photographers, where each post is created by a photographer and will be shown on the photographers' page.

Basic Flow:

- 1. The photographer's post is saved on the database.
- 2. The database sends the post back to the photographers' page.

Alternative flow:

Users are able to delete and edit the post from their profile page.

4.1.3.10 Tailors:

The web portal contains a page for tailors to display all tailors' posts.

- 1. Tailors' posts saved on the database.
- 2. The database sends the tailor's post to the tailors' page to be displayed.

Users are able to delete and edit the post from their profile page.

4.1.3.11 Models:

The system has a page for models to display all models' posts.

Basic Flow:

- 1. Models' posts saved on the database.
- 2. The database sends back models' posts to be displayed.

Alternative flow:

Users are able to delete and edit the post from their profile page.

4.1.3.12 Apply for a Job:

The system has a page to give users an opportunity to find a job.

Basic Flow:

- 1. Users access the job page.
- 2. Users choose the job that they want to apply for.
- 3. Click on 'upload file'.
- 4. Click on 'submit' to send to the database.

4.1.3.13 Gallery:

The gallery page is a feature that the admin is responsible for. It can be used by all four groups of users and public users.

- 1. Admin logs in to the fashion web portal database.
- 2. Admin selects 'gallery'.
- 3. Admin creates a file for each collection.
- 4. Admin specifies the collection name.
- 5. Admin uploads images to the collection.
- 6. Users access the gallery.
- 7. Users select images.

- 8. Users select a collection that they want to browse.
- 9. Users select videos.
- 10. Users choose a video that they want to see and click on 'play'.

Admin can delete and edit each collection.

Users can pause the video and select another video to watch.

4.1.3.14 Event:

The admin is responsible to add and update this page, and the event page can be used by all users.

Basic Flow:

- 1. Admin accesses the fashion portal database.
- 2. Admin selects 'event'.
- 3. Admin adds a new event.
- 4. Admin required to specify the event title, address and location.
- 5. Admin is able to add an event description.
- 6. Event saved.
- 7. The event will be displayed on the events page.
- 8. Users select 'event page' and look at the latest events.

Alternative flow:

If any event requires editing or changes, admin can edit from the web portal database.

4.1.3.15 News:

Admin is responsible for adding fashion news. Public users and the four groups of users can read the fashion news.

- 1. Admin accesses the database.
- 2. Admin selects 'news'.
- 3. Admin add new news.

- 4. Admin will need to add news title, body and image.
- 5. Click 'save'.
- 6. The database sends the news back to the news page.
- 7. Users click on the news page to browse the latest news.

If the news needs any editing or changes, admin can access the database and select the news that they want to change.

4.1.3.16 Online shopping:

The admin is responsible for online shopping. The four groups of users and public users can browse the shops.

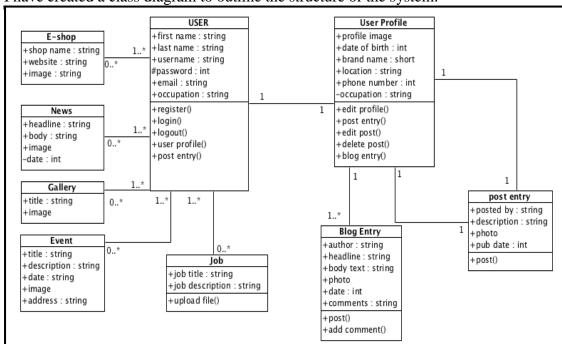
Basic Flow:

- 1. Admin accesses the database.
- 2. Admin clicks on 'shop'.
- 3. Admin adds a new e-shop.
- 4. Admin required to specify the shop name, website link and shop image.
- 5. Click on 'save'.
- 6. The database will send the new shop to be displayed on the shop page for users.

Alternative Flow:

If the admin needs to update the shop details, they could change it by accessing the required shop in the database.

4.2 Class Diagram



I have created a class diagram to outline the structure of the system.

a) User:

The user class contains the details relevant to the four groups of users. Users can register, login and logout as well as access the user profile and post entries.

b) <u>User Profile:</u>

The user profile class contains details that users should specify in the profile. Users can edit their profile, post entries, edit and delete posts, and write blog entries.

c) Post Entry:

The post entry class contains details relevant to what the user needs to add when creating a post. Users can post entries to be viewed in the user profile page.

d) Job:

The job class contains details that will be presented in the page for users. Users can upload files.

e) Event:

The event class contains details that will presented on events for the users.

f) Gallery:

The gallery class contains details that will be presented to view by the users.

g) News:

The news class contains details that will be presented to view by the users.

h) E-shop:

The e-shop class contains details that will be presented to view by the users.

4.3 User Interface Design

In order to know if I understood the users' needs for the web portal, I have created a prototype of the system design. The prototype will be tested by the users to ensure the system exceeds their needs.

4.3.1 Web Portal Interface Design

To design the user interface mock-ups, I needed to focus on usability guidelines for having friendlier software with limited capabilities, which is viewed to be more usable than comprehensive software. I have used Balsamiq to pre-define the user interface. Balsamiq is a wireframing software and mock-up tool with significant focus on usability (Balsamiq.com 2015). The program was easy to use and helped in creating the first stage of the web portal.

Creating a usable navigation bar to guide and to define each page for the user is essential to a useful design. I designed the fashion web portal's navigation bar to be in the top of the layout page, and when the user clicks on the page he wants, the colour of the chosen page changes so the user can easily know which page he is using. In addition, the navigation bar changes when the user logs in, and that will be further explained in the following specifications for each page. I chose to use very comfortable colours for the web portal, including a white colour for the background where fashion photos are shown to draw users' attention on the photos. For the buttons, I have chosen a blue colour for the user profile page to draw users' focus to this area and a grey colour for "submit."

Home Page:



Figure.1

The home page is the web portal's main page, and in this page I wanted to represent the main things for the user, as shown in Figure.1. There is a photo slideshow, like a carousel, to display different fashion photos, such as fashion shows and designers' collections. In the future, this area could be used as an advertisement bar. Under the slideshow, I decided to create three boxes. The first box is for upcoming events, and that information will be viewed as the events image, so when the user clicks on this box, he will be directed to the events page. The next box is for the latest fashion news, and the user will be directed to the news page when clicking on the box. The final box is for the latest designer collections. Therefore, on the home page, the user can be updated with fashion news, designers' collections and the upcoming events.

Signup page:

Signup Si										
Home Designers Model Tailor Photographer Gallary Events News shop job Login Signa	ıр									
first name: last name: username: Email: Password:										
Confirm your password: Occupation: Designer ▼ Signup	11									

Figure.2

The signup page is where the new user can register to the web portal. The component is designed for users to easily fill in the signup requirements. In the signup area, the user should select his occupation from a dropdown menu containing options for designer, photographer, model and tailor. The user clicks on "signup" to be verified from the database and successfully signed up.

Login:

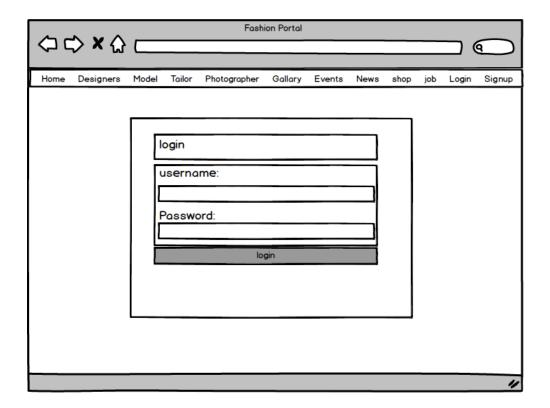


Figure.3

After signing up, the user can login at any time by selecting "login" and using his username and password. The user can securely access his page, and his data is stored in a secure environment. The login page is designed for ease of use and does not disturb other things. For example, if the login was in the home page, it would be difficult for the user to recognize the correct login place.

User Profile Page:

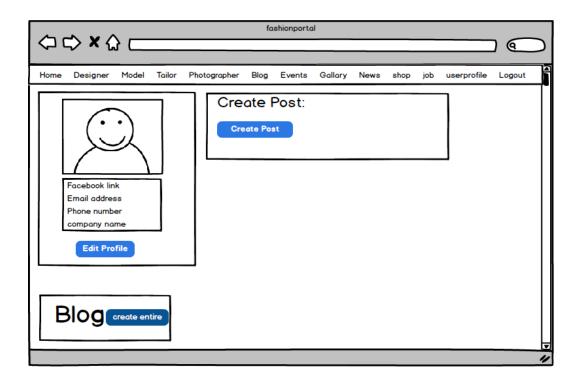


Figure.4

The user profile page is a private feature for the four groups of users to create their posts, and it is similar to other social media websites where users can access their profiles to add posts and to edit personal details. I have created this page so the user can clearly see each feature, as in Figure.3. In this page, the user can demonstrate different kinds of features; therefore, the profile details and the option to create posts will be displayed on the user's page, and if a designer logged in and created a post, the post will be displayed on the designer's page. As I have mentioned, I chose blue colour button for usability and to get the user's attention. When the user logs in, the navigation bar changes to have a user profile and a logout option. When the user logs out, the navigation will change to the main navigation.

Edit Profile:

Users click on "edit profile" to access the user profile page.

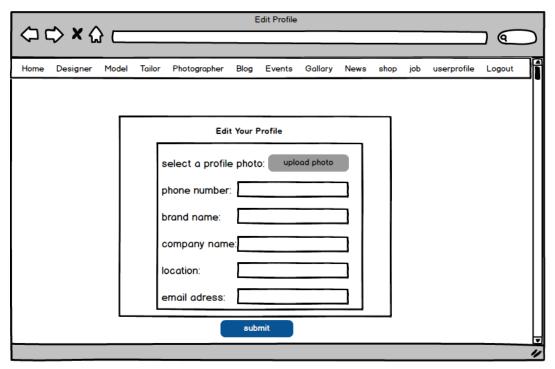


Figure.5

Figure.5 represents the edit profile page, and from this page users can upload profile photos and other contact details. In addition, by clicking on the "submit" button, the profile data will appear in the user profile page and will also display with any posts the user creates on the portal. This page will be clearly defined and easy for users to navigate.

Create Post:

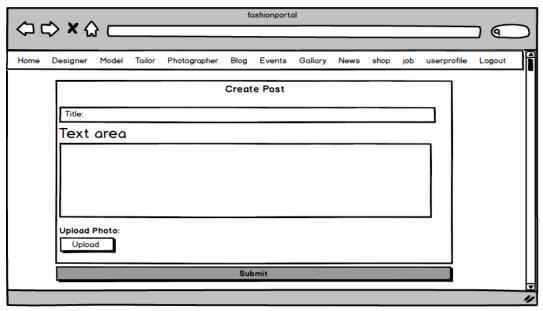


Figure.6

By clicking on "create post" in the user profile page, users will be able to easily write about their fashion industry experiences. And they can easily upload photos that address their work in fashion. Click on "submit" will direct the user to the user profile page to see his post, and others will be able to find the post on the user's page.

User's Page:

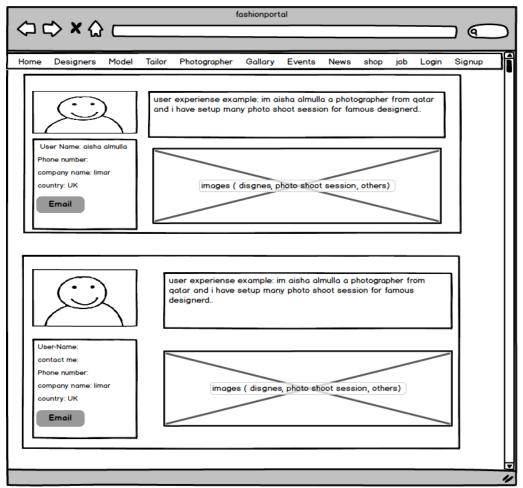


Figure.7

Figure.7 is the design for the user's page and this design will be created for each user's page, designer's page, photographer's page, model's page and tailor's page. In addition, each user's post is displayed in one border, and the border contains three boxes. The first box is to define the user's contact details and to display a photo that has been added in user's profile page. The second box is for the description where the users describe their fashion experience, and under the description is the image that belongs to the description. Furthermore, when a new user creates a post, it comes first in the page, and from the user's page, users can collaborate with each other by sending email and using contact numbers. And from there, users can introduce themselves to other users in an interesting way, and they do not need to search for their details in different places; it sums up all the details in one unique box.

Blog Entry:

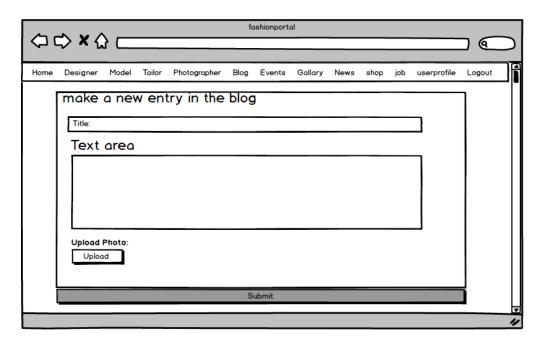


Figure.8

From the user's page, users can create their own blog posts, and the posts contain a title area and a text area, plus an option to upload photos. The page is clearly defined for the user, and by clicking on "submit," the user will be directed to the blog page.

Blog Page:

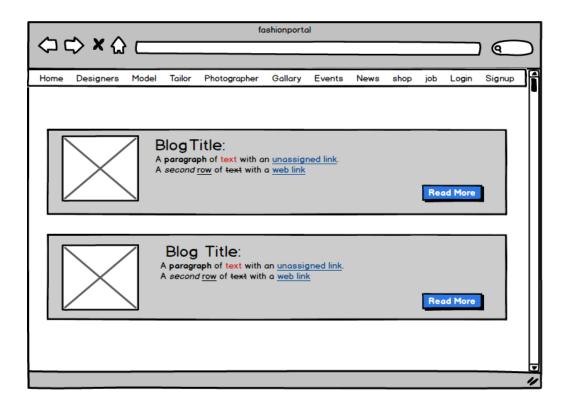


Figure.9

Each blog entry will be displayed is a container that features a blog image and a brief text sample from the opening paragraph, from which the user can continue reading the post by clicking on "read more."

Read More:

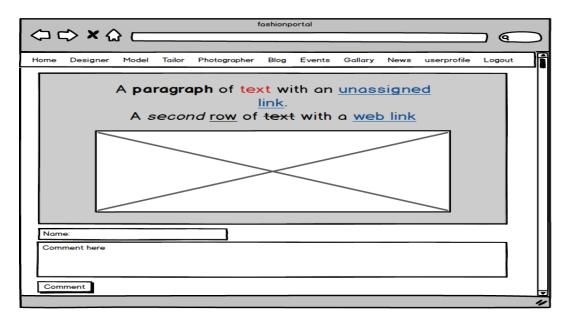


Figure.10

From this page, the user can complete reading the blog entry and comment on the post to give the author a greater opportunity to know fashion followers' opinions, as well as to let the user communicate with the main group of users.

Gallery:

From the gallery page, the user can find two options: images and videos. The user selects "gallery" from the navigation bar and a dropdown menu will be appear for the user to select either the images or the videos page.

Images Page:

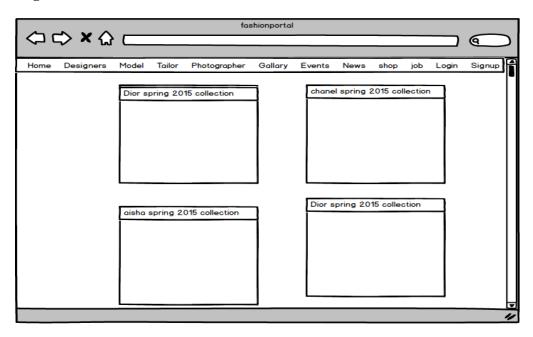


Figure.11

As shown in the above figure, users can view each designer's collection. Clicking on the collection box will display the rest of the collection photos. This design is very useful for the user and makes interaction effortless.

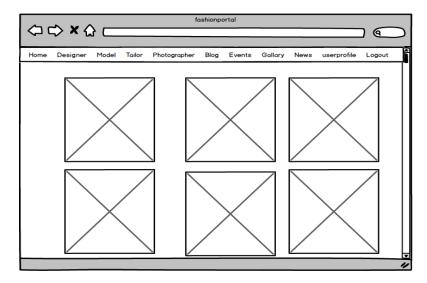


Figure.12

Figure.12 shows what the user gets when clicking on the collection box on the images page

Videos Page:

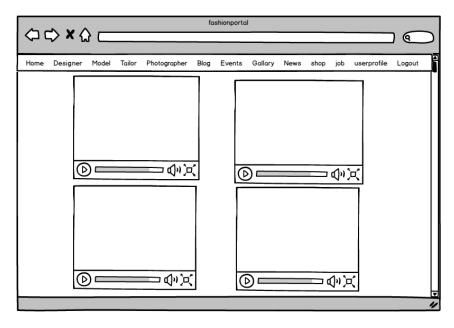


Figure.13

As shown in the above figure, users can see different videos related to fashion.

Events Page:

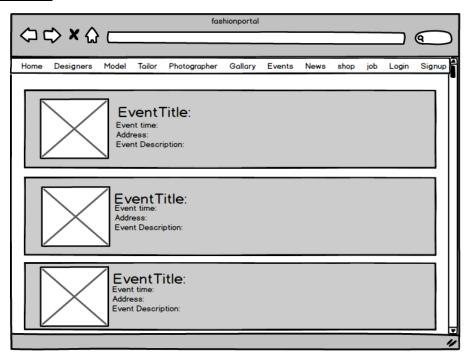


Figure.14

The event page is where users can easily learn the upcoming fashion events, and each event will be displayed in a container that features the event picture or logo, as well as the event location address and a brief description of the event.

News Page:

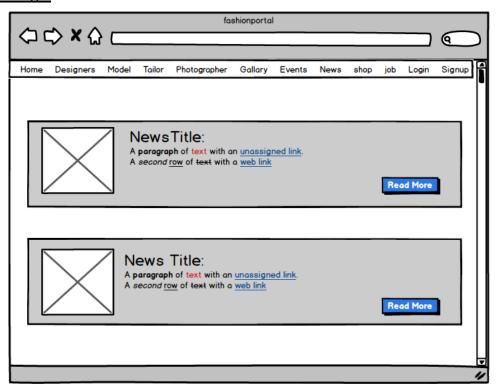


Figure.15

From this page, users can browse the latest news; therefore, I designed this page to be easy for the user to know the news and to choose the news he wants to read. In addition, each news container features the news title and a brief paragraph for the news, from which the user should click on "read more" to read the news.

News Read More Page:

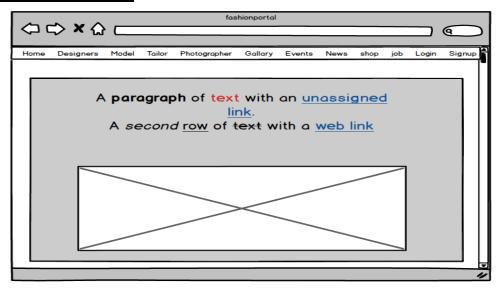


Figure 16

This figure shows the layout of the each news page.

Shop Page:

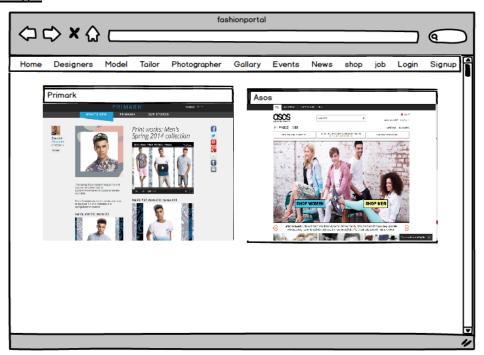


Figure.17

Designing the shop page in a way that easily represents each E-shop enables users to be directed to the chosen shop website with a single click. And this page is for the public users to find the popular and the not well-known e-shop websites in one place.

Job Page:

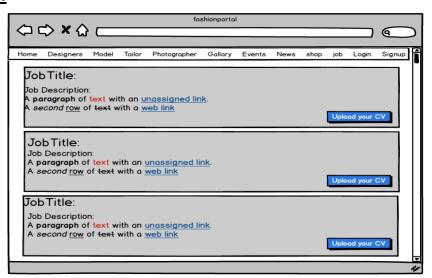


Figure.18

This page is designed to offer the user a career opportunity in fashion. Users can simply upload their CV's to pursue employment opportunities.

4.4 Test Plan

The next section outlines the testing that will be done on the system to define if the system meet the functionality requirement and the interface design requirements.

4.4.1 Test Cases:

The test cases are to ensure system functionality meets the requirement. This testing will be conducted on the implementation section, where the interface prototype design does not have a functionality to test.

Test 1	Test whether the user can register by creating a new account.
Environment	OS X
Browser	Google Chrome

Pre-Conditions

Web portal home page.

Process:

- 1. Select 'sign up' from the navigation bar on the web portal.
- 2. Input user first name in the 'first name' field.
- 3. Input user last name in the 'last name' field.
- 4. Input username "Username" in the 'username' field.
- 5. Input user email "aisha.a.1992@hotmail.com" in the 'email' field.
- 6. Input password in 'password' field.
- 7. Input password again in 'confirm your password' field.
- 8. Select user occupation from the box in the 'occupation' field.
- 9. Select 'sign up' button.
- 10. Check that the above information stored in the authentication and authorization table of the database.

Expected Outcome

The following process should be saved on the authentication and authorization table in the database. And the registration details record in the database will be used when the user logs in.

Test 2	Test whether user can login to the web portal.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: Before login, user must be registered.

Process:

- 1. Select 'login' from the navigation bar in the web portal.
- 2. Input username "Username" in 'username' field.
- 3. Input password in the 'password' field.
- 4. Select 'login' button.

Expected Outcome

User directed to the home page.

Actual Outcome: Pass / Fail

Test 3	Test whether user can use the user profile page functionality
Environment	OS X
Browser	Google Chrome

Pre-Conditions: User login.

Process:

- 1. Select 'user profile page' from the web portal navigation bar.
- 2. Select 'edit profile' button.
- 3. Input user date of birth in the 'date of birth' field.
- 4. Input user brand name in the 'brand name' field.
- 5. Input user contact number in the 'phone' field.
- 6. Input user location in the 'location' field.
- 7. Select 'upload photo' button in the 'profile photo' field.
- 8. Select 'cancel' button.
- 9. Select 'submit' button.
- 10. User profile details appear on the 'user profile' page.

Expected Outcome

The user profile page is displayed.

Test 4	Test whether user can use the create post functionality in the user
	profile page.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: User login and access to user profile page.

Process:

- 1. Select 'user profile' page from the web portal navigation bar.
- 2. Select 'create post' button to add a new post on user page.
- 3. Input post description in 'description' field
- 4. Input image by selecting 'upload image' from 'image' field.
- 5. Select 'cancel' button.
- 6. Select 'submit' button.
- 7. The above post display on the user profile page and the user page.

Expected Outcome

The user profile page is displayed.

Actual Outcome: Pass / Fail

Test 5	Test whether user can delete post.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: User login and access to user profile page.

Process:

- 1. Select user profile page.
- 2. Select 'delete' button under the post in the user profile page.

Expected Outcome

The user profile page is displayed, and the post is deleted from the user profile page and the user page.

Test 6	Test whether user can edit post.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: User login and access to user profile page.

Process:

- 1. Select 'user profile page' from the navigation bar in the web portal.
- 2. Select 'edit post' button under the post in the user profile page.
- 3. Change the input details in the post.
- 4. Change description and add a new image.
- 5. Select 'submit.'

Expected Outcome

The user profile page is displayed and the post has been changed from both the user profile page and the user page.

Actual Outcome: Pass / Fail

Test 7	Test whether user can add a new blog entry in the blog page.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: User login and access to user profile page.

Process:

- 1. Select user profile page from the navigation bar in the web portal.
- 2. Select 'create entry' button in the blog field.
- 3. Input "title" in the 'title' field.
- 4. Input "text" in the 'body text' field.
- 5. Input "image" by selecting the 'upload image' button in the 'image' field.
- 6. Select 'cancel' button.
- 7. Select 'submit' button.

Expected Outcome

Blog page is displayed with the user entry.

Test 8	Test whether user can access the user page and send an email.
Environment	OS X
Browser	Google Chrome

Pre-Conditions

Web portal home page.

Process:

- 1. Select "designers" page from the navigation bar in the web portal.
- 2. Choose one of the designers' posts.
- 3. Select designer's email.
- 4. Mail page pop up.
- 5. Select "photographers" page from the navigation bar in the web portal.
- 6. Choose one of the photographers' posts.
- 7. Select photographer's email.
- 8. Mail page pop up.
- 9. Select "tailors" page from the navigation bar in the web portal.
- 10. Choose one of the tailors' posts.
- 11. Select tailor's email.
- 12. Mail page pop up.
- 13. Select "models" page from the navigation bar in the web portal.
- 14. Choose one of the models' posts.
- 15. Select model's email.
- 16. Mail page pop up.

Expected Outcome

The mail page will pop up to send email, and the user is directed to the user page.

Test 9	Test whether user can access the blog page and add comments.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: Web portal home page.

Process:

- 1. Select 'blog' from the navigation bar in the web portal.
- 2. Choose one of the blog entries to view.
- 3. Select 'read more' button.
- 4. Input "name" in the 'name' field.
- 5. Input "comment" in the 'comment' field.
- 6. Select 'post' button.

Expected Outcome

User is able to read the blog posts, and images and comments are shown.

Actual Outcome: Pass / Fail

Test 10	Test whether user can access the gallery page.
Environment	OS X
Browser	Google Chrome

Pre-Conditions: Web portal home page.

Process:

- 1. Select 'gallery' from the navigation bar in the web portal.
- 2. Select 'images' from the gallery dropdown navigation bar.
- 3. Select one of the designers' collections.
- 4. Browse the collection images and select one image to have a larger image.
- 5. Select 'videos' from the gallery dropdown navigation bar.
- 6. Select one of the videos.
- 7. Click play.

Expected Outcome

Gallery page loads and the user can browse images and videos.

1
1
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Test 11	Test whether user can access the events page.
Environment	OS X
Browser	Google Chrome

Pre-Conditions

Web portal home page.

Process:

- 1. Select 'event' from the navigation bar in the web portal.
- 2. Events displayed with the specified requirements: event photo, location address, event title and event description.

Expected Outcome

Events displayed.

Actual Outcome: Pass / Fail

Test 12	Test 12 Test whether user can access the news page.	
Environment	OS X	
Browser	Google Chrome	

Pre-Conditions

Web portal home page.

Process:

- 1. Select 'news' from the navigation bar in the web portal.
- 2. Choose one of the news entries to view.
- 3. Select 'read more' button.
- 4. Display news title, description and image

Expected Outcome

News displayed.

Test 13	st 13 Test whether user can access the shop page.	
Environment	OS X	
Browser	Google Chrome	

Pre-Conditions: Web portal home page.

Process:

- 1. Select "shop" from the navigation bar in the web portal.
- 2. Display shop title and image.
- 3. Directed to the shop website.

Expected Outcome.

Directed to the shop website for shopping online.

Actual Outcome: Pass / Fail

Test 14	Test whether user can access to job page.
Environment	OS X
Browser	Google Chrome
D C 1141 1141	. 11

Pre-Conditions: Web portal home page.

Process:

- 1. Select "job" from the navigation bar in the web portal.
- 2. Display job title and description.
- 3. Upload file in each job.

Expected Outcome.

Job page displayed and user upload file.

Test 15	Test whether user can logout
Environment	OS X
Browser	Google Chrome
Pre-Conditions : Web	portal home page
Process: Select 'logor	ut' from the navigation bar in the web portal.
Expected Outcome: User logged out and directed to home page.	

4.5 Test Phase 1

Heuristic Evaluation:

To address if the design prototype meets the usability guidelines for the system, I will use a Heuristic evaluation to evaluate the web portal user interface. The interface will be tested by two users, who will indicate their feedback in the following table:

1. Interface Design Testing:

The table illustrates Nielsen's Heuristics usability principles and user feedback by giving a note about each principle and whether the system had met the principle or not:

Usability Principle:	Complies: (Y/N/NA) (NA = not applicable)	Notes:
Visibility of system status:	Y	The screens are visible and clearly definable.
Match between system and the real world:	Y	Understandable.
User control and freedom:	Y	
Consistency and standards:	Y	The screen is consistent

Error prevention:	Y	There should be a message for the user when finishing creating a post so the user could know where to find the post.
Recognition rather than recall:	NA	System instructions are recognizable, but system needs to have a cancel button on the edit profile page and create post page so the user can cancel and go back to the user profile page easily.
Flexibility and efficiency of use:	Y	System is flexible.
Aesthetic and minimalist design:	Y	Easy for users to deal with.
Help users recognize, diagnose and recover from errors:	Y	

I will take into consideration the users' feedback and will avoid the usability errors mentioned.

5. Implementation

5.1 Django Project:

Django is a high-level Python Web framework that makes it easier to build Web applications. It has most of the best practices built in. It is written in Python and C++.

Django can be used to speed up Web development as it was designed to help developers to quickly develop and deploy web applications. It takes care of much of the recurring patterns in Web development. Django was designed with security in mind. It helps developments to avoid common security mistakes in Web devilment. Django is very scalable. Sites such as Pinterest, Instagram many busy websites were built in Django. It is incredibly versatile. It has been by different organisations and companies build different types of applications. Django advocates the decoupling of logic from presentation, which is why Django could be considered as having the Model View Controller (MVC) architecture. Practically, however, Django design pattern could be better described as having a Model-Template-View (MTV) architecture, in which the Model contains the database interfacing classes, the View stores the request-processing classes and functions and the Template contains the tinplating language for the final presentation (Django, 2015).

5.1.1 Creating a Django Project:

Django applications are called projects. A project is made up of several applications or apps. A Django project is a collection of settings for an instance of Django. These settings includes database configuration, Dango-specific options, as well as application-specific settings (Django, 2015).

The command: \$ django-admin start project webportalsite

Creates a Django project directory. This directory structure for the project is shown below:

webportalsite/

manage.py
webportalsite/
__init__.py
settings.py
urls.py
wsgi.py

- 1. The outer webportalsite/ root directory is simply a container for the webportalsite project. It contains all the files and folders for the webportalsite project.
- 2. Manage.py provide a means to interact with a Django project in various ways.
- 3. The inner webportalsite/ directory is the Python package for the webportal project.
- 4. webportalsite/__init__.py defines a Python package. It tells Python that this directory should be treated as a Python package rather than an ordinary folder.
- 4. webportalsite/settings.py contains all the settings and configurations for the webportalsite.
- 5. webportalsite/urls.py contains the URL declarations for the webportalsite project
- 6. webportalsite/wsgi.py serves for as an entry point for WSGI or WSGI-compatible servers (Django, 2015).

5.1.2 Database setup:

The default database configuration in Django uses the SQLite. This database is included in Python. SQLite is easiest choice. Other choices includes more robust database like MySQL, PostgreSQL. In this project however, I have decided to use the in-built SQLite database facilitate development. This database is only suitable during development. Any of the more robust databases must be used for the actual deployment of the Web app.

In this case the database must be created using the command:

CREATE DATABASE database_name;

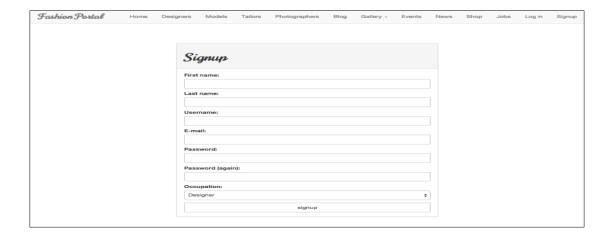
5.2 Bootstrap:

Reasons for choosing Bootstrap, Makes frontend web development faster and easier. Furthermore it contains a free collection of tools to implementing websites, whereas helps to quickly and easily build static websites and web application, therefore the web designers can either work with static HTML as it comes to them with Bootstrap, or they can combine this with PHP and Python or a content management system. Written in HTML, CSS (Bootstrap, 2015).

5.3 Implementing the web portal:

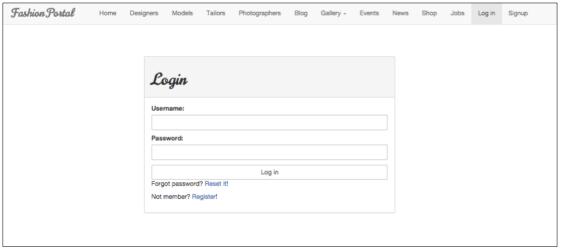
I will provided the web portal as a figures, to show some implemented functionality and the code of them, whereas this code where developed in the View which stores the request-processing classes. In addition the code that demonstrate as an HTML in Template file for the final presentation. Consequently I will not be able to define all implemented work because of the quantity of them.

5.3.1 Signup Page:



Code implemented to get the signup functionality:

5.3.2 Login Page:



Code implemented to get the login functionality:

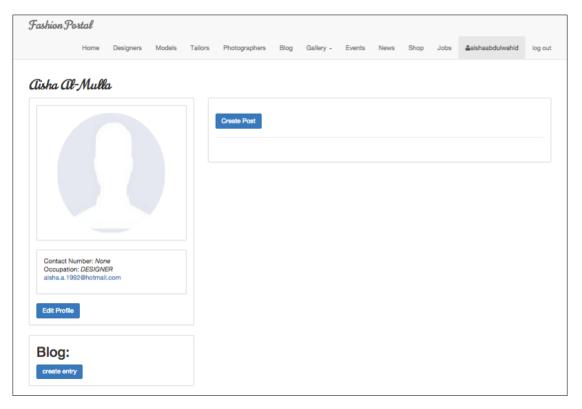
```
def login_page(request):
    if request.method == 'POST':
        form = LoginForm(request.POST)
    if form.is_valid():
        username = form.cleaned_data['username']
        password = form.cleaned_data['password']
        user = authenticate(username='username', password='password',)

    if user is not None:
        if user.is_active:
            login(request , user)
            return HttpResponseRedirect(reverse('fashionportal:profile'))

    else:
        form = LoginForm()
        return render(request, 'fashionportal/login.html', {'form': form})

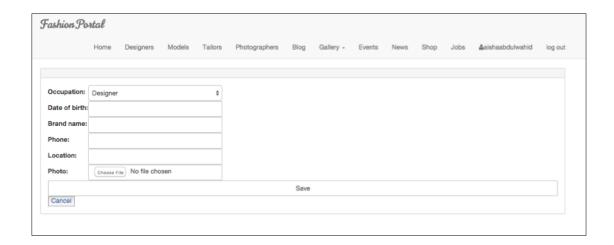
else:
    form = LoginForm()
    return render(request, 'fashionportal/login.html', {'form': form})
```

5.3.3 User Profile Page:



Code implemented to get the user profile functionality:

5.3.4 Edit Profile:

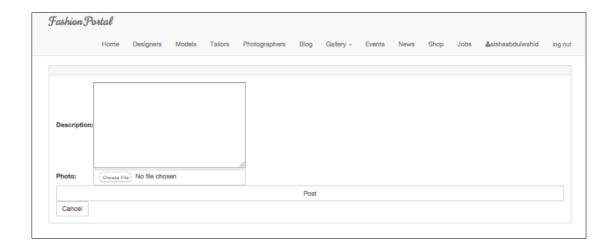


Code implemented to let user edit profile page details:

```
class EditProfileView(UpdateView):
    model = UserProfile
    fields = ['occupation','date_of_birth', 'brand_name', 'phone', 'location', 'profile_image']
    template_name = 'fashionportal/edit-profile.html'
    success_url = 'fashionportal:profile'
    slug_field = 'user_username'
    slug_url_kwarg = 'username'

def get_success_url(self):
    return reverse(self.success_url, args=(self.request.user.username,))
```

5.3.5 Create Post Page:



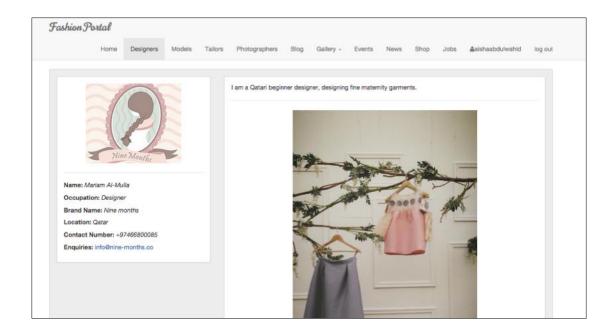
Code implemented to let user to create a post:

```
class CreatePostView(SuccessMessageMixin, CreateView):
   model = PostEntry
   fields = ('description', 'photo')
   template_name = 'fashionportal/create-post.html'
   success_url = 'fashionportal:profile'
   success_message = 'profile and description has been posted to'

def form_valid(self, form):
    form.instance.posted_by = self.request.user.userprofile
    return super(CreatePostView, self).form_valid(form)

def get_success_url(self):
    return reverse(self.success_url, args=(self.request.user.username,))
```

5.3.6 Users Page: (Designers)



Code implemented to get users post on each page: the following code is for designers' page.

5.4 Problems:

- 1. I will define two problems that I have challenged during implementation:
- 2. Complexity to get the write code at the same time where errors appears and that takes time to be sort out.
- 3. Comment in the blog page, users are not able to see their comments in the blog post and there not able to see the image that they post. Therefore because time was limited and I was not have enough time to figure out the problem.

6. Results and Evaluation

6.1 Test Phase 2

After implementing the whole functionality of the web portal, I had users test system functionality using the test cases provided in the test plan section. And I outlined the testing results in the following table:

Test No	Test Name	Pass/ Fail	Comments
1	Test whether the user can register by creating a new account.	Pass	Expected outcome.
2	Test whether user can login to the web portal.	Pass	Expected outcome.
3	Test whether user can use the user profile page functionality.	Pass	Expected outcome.
4	Test whether user can use the create post functionality in the user profile page.	Pass	Expected outcome.
5	Test whether user can delete a post.	Pass	Expected outcome.
6	Test whether user can edit a post.	Pass	Expected outcome.
7	Test whether user can add a new blog entry in the blog page.	Pass	Expected outcome.
8	Test whether user can access a user's page and send an email.	Pass	Expected outcome.
9	Test whether user can access the blog page and add comment.	Pass	Unexpected outcome. User comment does not display in the blog page.
10	Test whether user can access the gallery page.	Pass	Expected outcome.
11	Test whether user can access the events page.	Pass	Expected outcome.
12	Test whether user can access the news page.	Pass	Expected outcome.
13	Test whether user can access the shop page.	Pass	Expected outcome.
14	Test whether user can access the job page.	Pass	Expected outcome.
15	Test whether user can logout,	Pass	Expected outcome.

6.2 Evaluation

This section evaluates whether the system achieves users' needs and whether the system achieves all functional and non-functional requirements. The evaluation will be using both user interface testing and user test cases. The evaluation will be specified in more detail:

- 1. The system covers almost all functional and non-functional requirements, except the 'Could Have' requirement which is subject to time constraints. As a result, the time was not enough to have this requirement in the system; therefore, it will be outlined as a future work.
- 2. The users find the fashion web portal functionality very defined and easy to use.
- 3. In user interface testing, users encountered a problem when posting, and this problem has been taken into consideration and implemented on the system. The other problem was the interface design needed a cancel button when the user selected 'edit profile' or 'create a post,' and the 'cancel' button would direct back to the user profile page. As a result, the problem has been covered in the implementation.
- 4. The system has successfully allowed the users to interact with the functionality, and users find it interesting.
- 5. Therefore, the system has covered the non-functionality requirement. The system implemented to let the user register and login to the system securely.

7. Future Work

The system needs to improve functionality and to add more functionality for the users. As a result, in the future I will focus on adding some interesting functionality for the users, and the functionality will be more specified below:

- To help the main groups of users to collaborate with each other at the web portal and to save the time of sending a formal email, I would like to implement a chat feature, where users can have a live chat with other users. For instance, if a designer wants a photographer for his new collection, he could easily access the photographers' page and choose one of the photographers, then click on the 'chat' button in the photographer post to have a live chat with the photographer.
- Another feature will be a small calendar on each user's page so all users
 can add their important events. For example, on a designer's page, I will
 implement another bar in the right side of the page, and in this bar a
 calendar will be displayed with all the designer's important events; this
 enables designers to easily share their important days with other users.
- In addition, I will adjust the comment problem in the blog page, and users
 will be able to add and delete comments. Furthermore, the comment
 feature will be added in the gallery page.
- Users will be able to vote on and like the designer's collection in the gallery page.
- Will have a contact page so people can contact the web portal admin to complain and to give more suggestions.
- Designers will be able to add their own collections in the gallery.

8. Conclusions

In conclusion, the project achieved its goal of developing a fashion web portal for different user groups and to implement a very useful web interface. Furthermore, the project achieved the goal of developing a web portal that works well with all screens and devices and advanced internet technologies; I used Bootstrap framework for the frontend and Django for the backend, and both offer very advanced technologies.

9. Reflection

In this part of the report, I will reflect on the principles I had throughout designing, implementing and documenting the project. First of all, choosing this proposed project was not easy because I was a bit afraid I would not be able to achieve the project requirement. When I saw the title in the PATS, I became interested with the main Idea of it, and I chose to design a web portal for fashion industry because I love fashion and believe every girl in the world loves fashion. Therefore, I decided to choose the project I would enjoy doing rather than one that held little interest. From there, I started looking at the project and chose the framework, and I selected Django and Bootstrap to work, even though I did not have much experience with either program. The project has improved my skills, and those skills will be carried over into future activities. In addition, working in one large project will let the student improve her studies and personal skills. The first thing that I feel that I have improved in is time management. The project's time is roughly three months; therefore, the project forced me to follow a schedule, and I had to follow it despite facing some problems in implementation, which lead me to be a bit late from my timetable. Furthermore, the supervisor meetings gave me a real responsibility to finish the work on time. Engaging with a real supervisor for the first time was very different, and that gave me more responsibility to show the supervisor good work and to let her be satisfied with the outcome. As for study skills, I improved my studies in designing a system and documenting all the implementing and designing work. Last year, we covered a module named Human Computer Interaction, and in this report, I have improved on what we covered in this module, which is specifying the users and designing a

usable system that expresses the users' needs. And I have developed my skills in drawing the diagrams and specifying the system in more detail, as we had studied all this in the first year in Developing Quality Software. In this report, I addressed my studies in that module by specifying the functionality and the nonfunctionality uses and by designing UML diagrams. Therefore, I had improved my skills in coding and implementing a real software, where in my first year we had covered only basic python, HTML and CSS. Finally, the project was very useful and had a great impact on me.

10. References:

Balsamiq.com 2015, Rapid, effective and fun wireframing software, Balsamiq, accessed 15 March 2015, http://www.balsamiq.com

Creativeportal.org.uk 2015, Top fashion designers, photographers, models & beauticians, Creative Portal, accessed 25 April 2015 http://creativeportal.org.uk/

Djangoproject.com,. 'The Web Framework For Perfectionists With Deadlines | Django'. N.p., 2015. 1 April. 2015.https://www.djangoproject.com/

Europeanafashion.eu 2015, Browse, Europeana Fashion, accessed 25 April 2015, http://www.europeanafashion.eu/portal/browse.html

Fashion.net 2015. This is the world of fashion, Fashion.net, accessed 25 April 2015, http://www.fashion.net/

Its.hku.hk 2015, Development of the HKU campus portal, Hong Kong University, accessed 25 April 2015, https://www.its.hku.hk/news/ccnews100/portal.htm

Mark Otto, and Bootstrap contributors. 'Bootstrap · The World's Most Popular Mobile-First And Responsive Front-End Framework.'.Getbootstrap.com. N.p., 2015.. 1 April. 2015.http://getbootstrap.com/

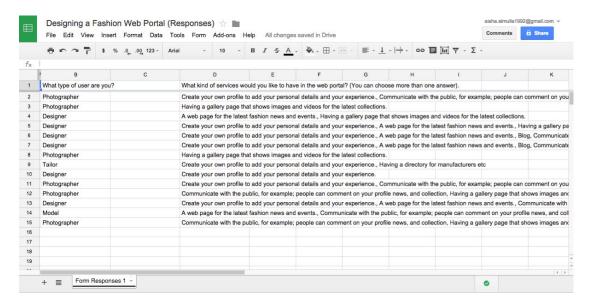
Mohr, I 2015, The impact of social media on the fashion industry, St. John's University, accessed 28 April 2015, http://m.www.na-businesspress.com/JABE/MohrI_Web15_2_.pdf>

11. Appendices:

11.1 Questionnaire Questions:

9	
	Designing a Fashion Web Portal
	I'm working on my final year project which is designing a web portal that facilitate the collaboration between fashion designers, tailors, models, photographers, and all fashion followers. So, would you please help me to define the services and requirements that you wish to be included in the website.
wi	nat type of user are you?
9	Designer
3	Tailor
0	Model
9	Photographer
	nat kind of services would you like to have in the web portal? (You can choose more than one swer).
3	Create your own profile to add your personal details and your experience.
3	A web page for the latest fashion news and events.
9	Blog
	Communicate with the public, for example; people can comment on your profile news, and llection
3	Having a gallery page that shows images and videos for the latest collections.
3	Other:

11.2 Questionnaire Reposes:



11.3 Survey Link:

http://goo.gl/forms/NyvJWgu0C5