



Interim Report

Online Scrapbook

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This report aims to provide the details of the background, approach and conclusion of the Online Scrapbook project. The Interim Report contains the specification and design phase; including requirements, prototyping and testing. We aim to conclude with a summary of project phase two and an insight into phase three.

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In addition to this, a huge thank you to Wendy Ivins for aiding me with the development of my class diagram. Furthermore, Wendy Ivins has provided useful and interesting ideas for future development of the Online Scrapbook, so I'd like to highlight my gratitude of her support and advice.

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1.0 Introduction

The project is an online scrapbook web application that will be created to allow users to organise their photos, videos and/or diary notes using locations and time points. Additionally, whilst being able to share these on various social networking sites, such as Facebook. A more detailed description has been included within '2.0 Background'. One of the primary aims of this project is to allow travellers to be able to create a detailed scrapbook, including the most important memories of their time abroad. The secondary aim of this project is to ensure the web site has efficient usability, to guarantee on-the-move travellers can quickly access the site, update the content, save their work and exit out.

The target audience, or beneficiaries for this website is the student population; this is because they are the most common age representation of most likely travellers. Students that undertake gap years are more likely to spend the time travelling, and with the increasing use of technology and social networking sites, this project could be of great demand.

As mentioned before, in order to achieve these goals a lot of implementation has to be completed; the project scope for this is as follows. Creating the website; the website will be created using HTML 5, which is a computer language devised to allow website creation. Formatting the website; the website will be formatted using CSS 3, the most up to date language for defining the look and feel of the website. In order to create locations, the use of Google Maps API will be included; this allows the website to include pin-point functionality, organising photographs through location and show users a final view of where they have visited, (Google, n.d.). Time points and sharing; this will be done in the same way, to resemble Facebook's timeline, making it easier for users to understand how the site works, (Facebook & Zuckerberg, n.d.). However, there are a few constraints in which will need to be overcome; allowing access to Facebook in order to share photo collections and perhaps making the Google Maps API interactive for the user. Both these functions could be included or made as desirable. Lastly, for this report there are no assumptions, we have decided to create a well-written and explained document to ensure every reader obtains a good understanding of the project.

This report contains three main sections; these are the background, approach and conclusion. The background will include information about related work that may either be used in the project or that attempts to solve a problem. The approach will be defined as the specification and design section for the project; including a website mock-up, and a detailed list of functionality for the site. Finally, the conclusion, this will be a summary of the main aims of the interim report, mentioning possible future work and the introduction to the final report.

2.0 Background

2.1 Project Description

The project is a traveller's journal application, in other words, an online scrapbook. The idea came from personal experiences with there being no suitable website in order to allow users to create an easy to use, online scrapbook. The application takes advantage of Google Maps API, which will allow its users to organise their photos, diary notes, etc. in two-dimensional space by physical locations and time points. Physical locations will be visualised using the Google Maps API, whilst the time points will somewhat resemble Facebook's timeline in order to store these physical locations at different time points. The 'pins' will be used to show what places have been visited and places of future interest. Each of these locations or 'pins' will be click-able, with links leading to external websites. These external websites will allow the data to be shared using various social networking applications such as Facebook, Twitter and Instagram. Similarly, there will be links leading to text documents which will be used to form diary descriptions of particular visits. Lastly, the application, as mentioned above, will be supported by Facebook and Twitter to facilitate information sharing and including friends.

2.2 The Problem

From personal experiences whilst travelling, one of the main problems is not having the available resources to be able to document your experiences and organise all media types, such as photos, videos and diary notes. There are two main methods in which currently exist as a method of trying to solve this problem; creating the scrapbook after your trip, or upload photos on the move to social networking sites such as Facebook.

Facebook allows you to create albums, uploads photos, and share to various audiences; whilst benefiting from the use of tags and captions. Some might suggest that this is the best method, but in terms of creating a personal scrapbook and really documenting the experience, this is not satisfactory. In addition to this, there are several online services currently on the market that offers the availability to create the scrapbook once you're travels have finished. The disadvantage to this method is content; trying to remember day by day activities is very difficult. Travellers return to home with large quantities of pictures in folders, usually organised by date taken or size. This therefore, makes the process of creating the scrapbook after, very inconvenient and untimely. Travellers abroad will most likely be paying for internet; so a system that takes advantage of efficient upload and ease of use is extremely required.

Lastly, being able to share what you have documented has become very tedious; most social networking sites have been riddled with advertisements, making it difficult to see an important post, or view photos of possible interest. The main problem here is making your content visible, allowing friends and family to view your time abroad with ease. Therefore, a site or application that facilitates the use of efficient sharing is very desirable.

2.3 Existing Websites

For the project website to be successful, research has been conducted into current scrapbooking sites, see bibliography. The reason for doing this reason is to gain an understanding of what makes a good scrapbooking site; and to ensure the project site being created contains enough functionality to be sufficient. The main functionality requested by users wanting to make a scrapbook is as shown below:

- Customisation
- Sharing
- Cost
- Usability
- Tutorials
- Templates (or Examples)

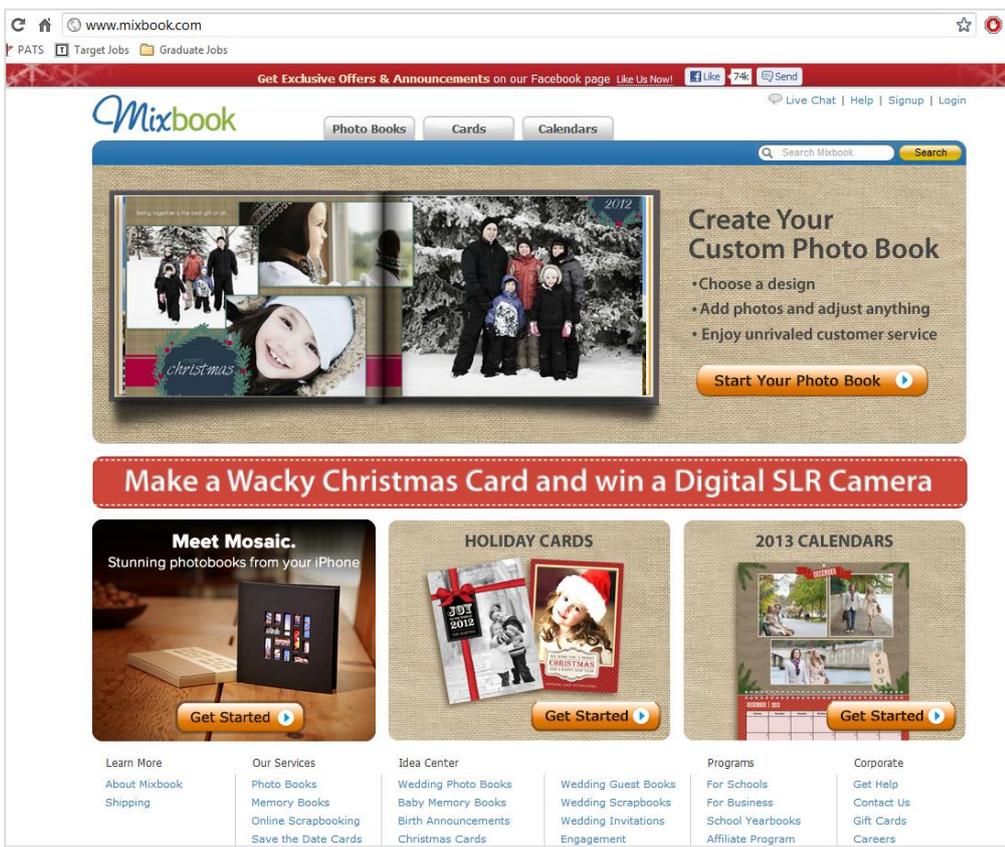


Figure 1 - MixBook example

The screenshot above shows 'MixBook', an exemplary online scrapbook site. This site encourages its users to adopt templates based on the topic type, for example; Christmas, Graduations or Sports Day. Key features to point out from using this site are the use of templates; the templates are very appropriate, allowing you to swap the images used with images of your own. Furthermore, the site adopts the use of stickers; adding stickers to your photos to make them more attractive and sometimes highlight key events; such as a Christmas sticker to go with the theme of the scrapbook. (Anon., n.d.)

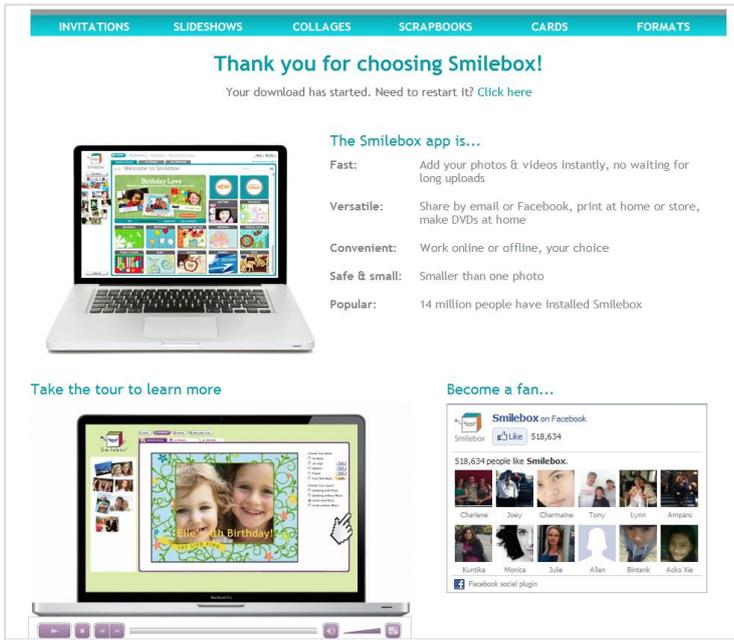


Figure 2 - Smilebox example

This is another site, Smilebox for creating an online scrapbook, (Hamudot, 2010). This site is slightly different as it involves installing an application before you can use the system. This is beneficial as it ensures the further use of cross platform devices such as mobile phones and tablets. The main feature to point out from the analysis is captions for pictures; they have included captions underneath the photo, but with additional use of writing captions across the picture, as shown in the image above. (Hamudot, 2010)

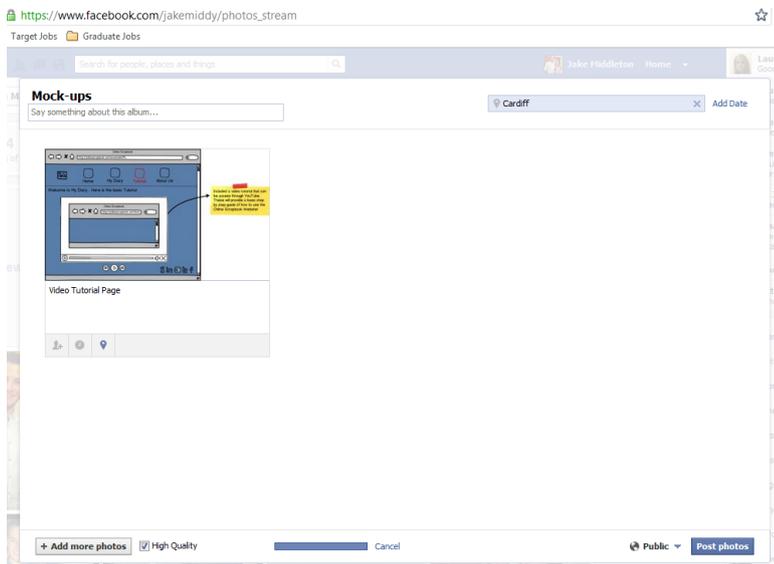


Figure 3 - Facebook example

Lastly, this is Facebook’s version of organising photos. You are able to add an album name, a description of the album/photo, date and location stamps, as well as tagging friends. This was very easy to use once this screen was found; however, you were unable to just create an album first, you had to provide an image location. Key points to take from this system are the use of tagging, sharing and album description.

2.4 Design Methods

This section aims to describe the design method used before the Implementation process. Due to the fact that this is a website project, creating designs allows you to see imperfections in the layout, functionality and navigation; three major deliverables of any website. To aid this process, Balsamiq mock-ups (Guilizzoni, et al., 2012) was used, as shown in the screenshot below.

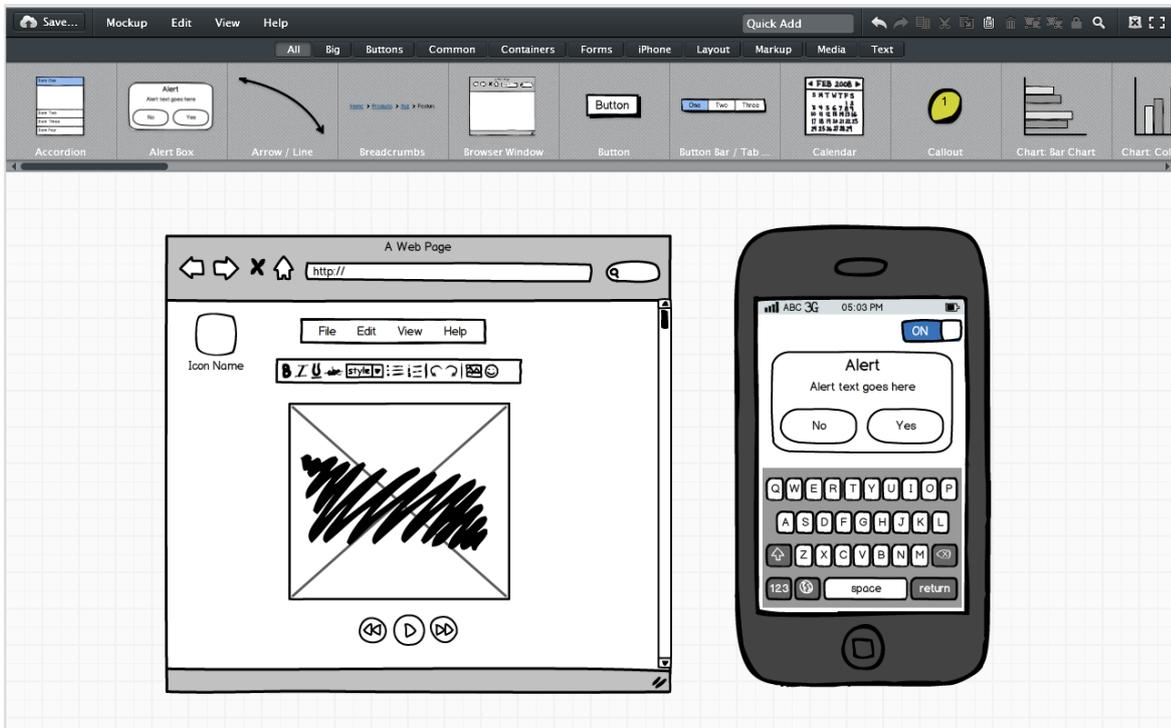


Figure 4 - Creating design mock-ups with Balsamiq

Balsamiq is a web service that provides digital drawing tools, allowing you to create website mock-up's that look and feel like hand drawn designs, (Guilizzoni, et al., 2012). This is a drag and drop system, which is very easy to use and tremendously fast. In addition to this, the reason for choosing this mock-up site over others is the use of import and export; you are able to export your designs straight into Google Drive; depending on whether you are developing inside the add on. Balsamiq similarly lets you create mock-up designs for iOS; therefore, if you are developing a cross platform system, this is the perfect counterpart for intermediate state designing. Lastly, you are able to benefit from click-through prototypes; meaning the use of links lets you generate clock-through prototypes of a website, for demonstrations and usability testing. *See section 4.0 for full Designs of the project site; Online Scrapbook.*

Furthermore, the use of whiteboard designing was implemented; this was in order to gain a primary understanding and visual interpretation of what is going to be created. The main image of what the final product may perhaps look like is displayed in the centre; with annotations coming off each main function, listing in bullet point form what it is going to perform, how and through which language. Please note; this was purely used to ensure an initial understanding was gained and as a daily reminder of what needs to be done, see figure 5.

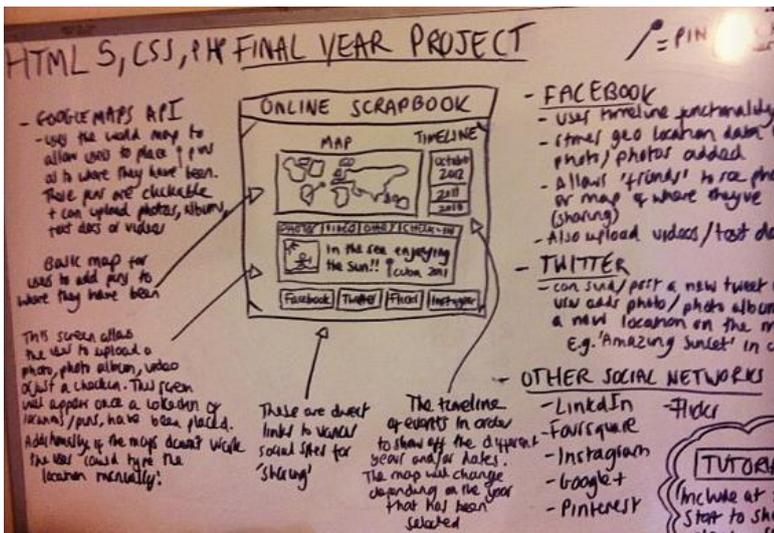


Figure 5 - Rough whiteboard design

Lastly, Microsoft Visio was used to create a more detailed site map, UML model diagram and a wireframe diagram. This is software provided by Microsoft and is defined as a 2D-object drawing application. As mentioned above, this provided a useful tool to create highly detailed diagrams for various parts of this report. It is important for both technical and non-technical readers to see low and high level detailed diagrams, to ensure the understanding of the system is met for both groups of personnel.

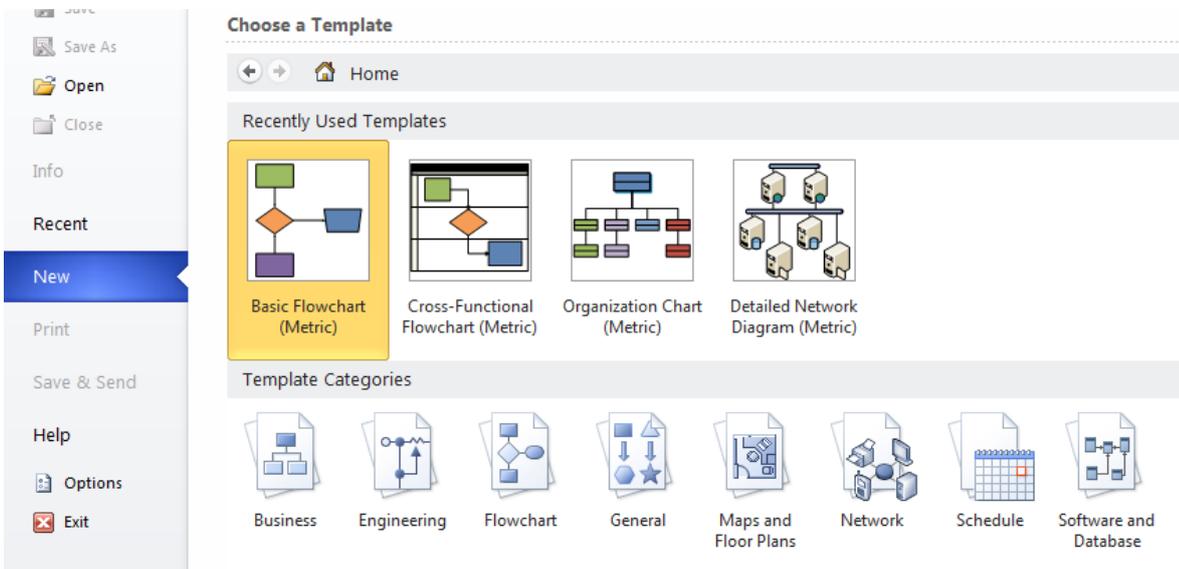


Figure 6 - Microsoft Visio

2.5 Implementation Methods

The implementation is a key stage of this project; it involves developing the website and implementing programming languages to ensure the site works correctly. Below is a list of the implementation methods to be used;

HTML (Hypertext Mark-up Language) - the reason for choosing HTML5 is because it is the most up to date hypertext mark-up language. The language does not require any extra browser plugins and has more beneficial usability. HTML can create more elegant forms and is also cross-

platform; meaning it should work flawlessly whether its laptops, smart phones or tablet. This language will be developing the pages for the site using a simple text editor and will be formatted using style sheets.

CSS (Cascading Style Sheets) - the reason for selecting CSS is to describe the look and formatting of a website to the web browser, building a content-rich site. CSS3 is the most updated standard for creating unique, visually pleasing graphics for HTML web pages. In order to increase the usability of the website, adopting appealing colours will aid users finding key functionality, as this is a huge benefit to CSS.

PHP (Hypertext Pre-processor) – by implementing PHP, the site will contain access to a registration and login page. PHP is the most popular scripting language on the web; it is used to enhance web pages. With PHP, you are able to benefit from creating username and password login pages, check details from a form, create forums, picture galleries, etc.

MySQL – this is the most popular open source database due its high performance, high reliability and ease of use; and these are the primary reasons for including this as an implementation tool. MySQL will be used for the creation and management of the database. In addition to this, for searching, editing, storing and retrieving data for a server. This is required to allow users to available to save images, videos and diary notes.

2.6 Constraints

With such an easily-interpreted project, and a project that could potentially have an increased scope; the constraints are purely based on the time frame. In simpler terms; with more time, more functionality can be included, whereas a tight timeline could affect the implementation process. Throughout the design process, a key link was established between uploading a photo and viewing the photos location interactively. A fundamental function of the system is to include Google Maps API, using the map to search for locations. Whilst conducting the design mock-up, it appears more transparent, to include a drop-down menu; where a user can select a country or location and this will be previewed on the map. This ensures that the user still receives the same service; being able to view the location of photos taken, but skips the complicated process of having to go through Google Maps API. Therefore improving the time taken, ease of use and usability.

3.0 Specification

3.1 Site Map

In order to provide an indistinct picture of the system, a site map will be created. A site map is a list or diagram which represents the hierarchical structure of the html pages in a website. It is used to map out the site architecture, for example, the structure, navigation and page order. Additionally, to plan the logical presentation, visualise user paths and organise the presentation or the web site.

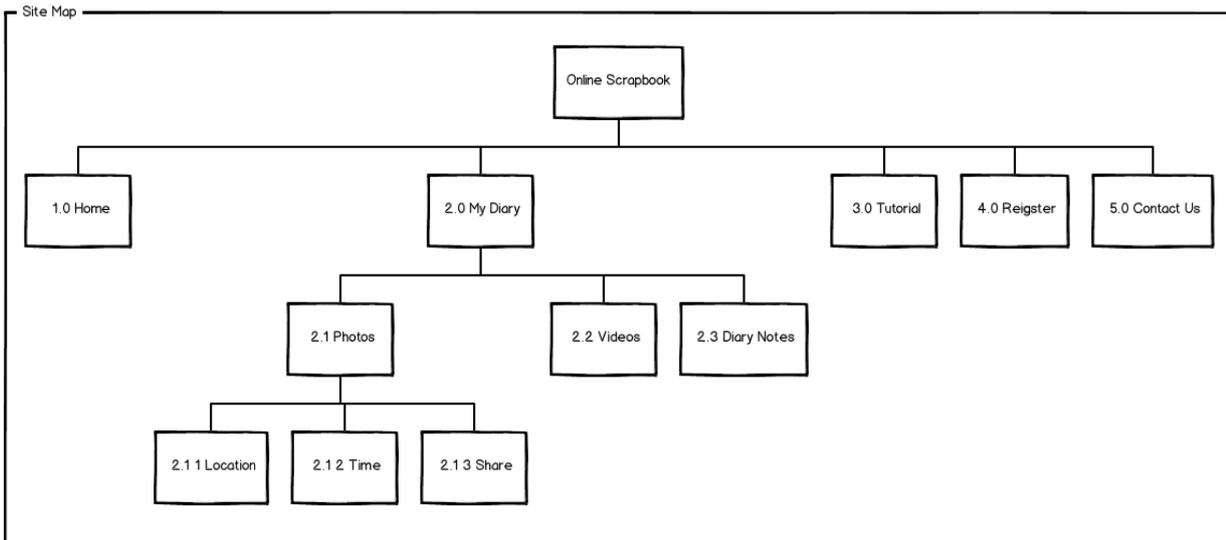


Figure 7 - Simple Site Map

As you can see from Figure 1 above, the site is very simple and easy to follow. The key functionality can be found in 'My Diary'; which allows users to upload their photos, videos and diary notes; with the option to add a location, time and sharing ability. Additionally, the 'Home', 'Tutorial' and 'About Us' pages do not require complicated user interaction; they provide information to improve the all-round experience. Figure 7 shows the sitemap included with annotated notes to describe the site further.

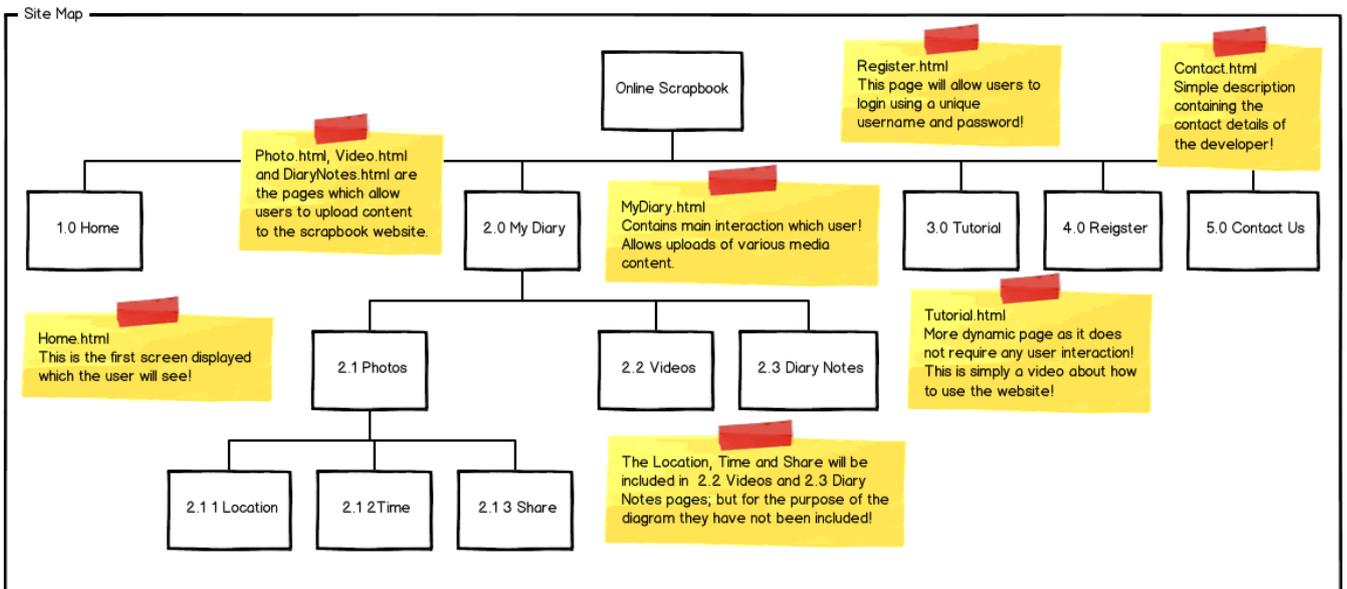


Figure 8 - Annotated Site Map

The key point to note from the site map is the use of flat site architecture. Each page is within one clickable level of depth; an advantage to users looking for a fast and easy user interaction or experience. This is critical because the fewer links you make a 'spider' follow in order to find a page on the site, the higher your chances the page will be found, indexed and highly valued.

3.2 Requirements

Defining requirements is a crucial part of the development of a website. Within this there is a required need to formulate functional requirements whether they are essential, desirable or optional for the website. The following list contains all the functional and non-functional requirements which are required within this project. The requirements have been derived from a combination of modelling the core functions of the website within a use case diagram and class diagram. The discovery of these core functionalities formulated other requirements within the gathering process.

3.2.1 Use Case Diagram

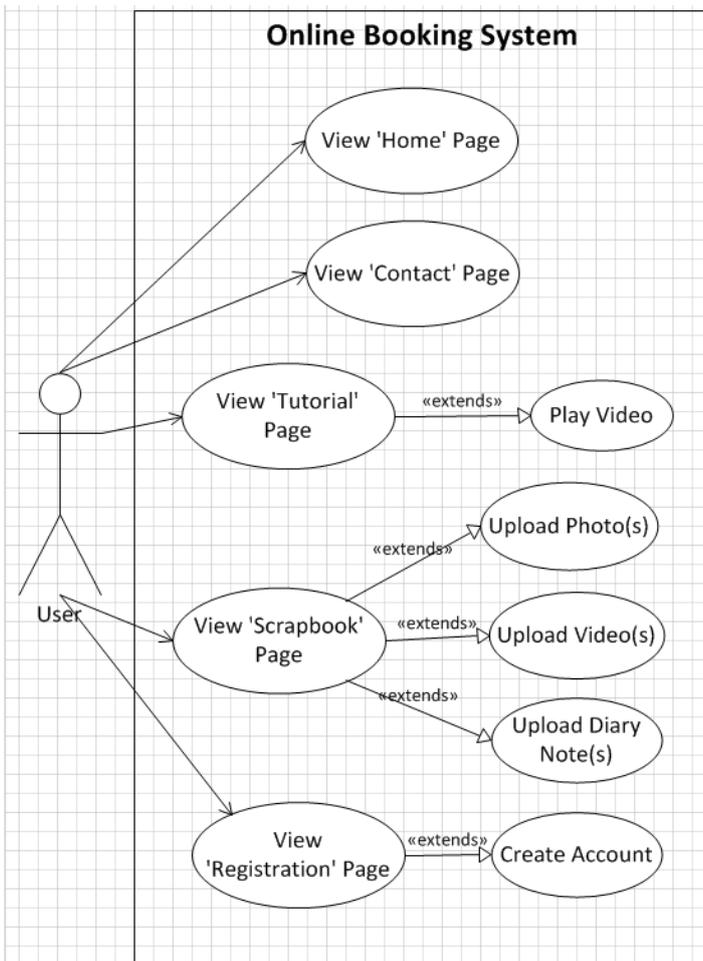


Figure 9 - Use Case Diagram

A use case diagram describes a sequence of actions that provide something of measurable value to an actor. Actors are used to play a role in one or more interactions within your system; this is a person, organisation or external system. The use cases purpose is not to show the order in which steps are performed, but to help you as a developer understand relationships between use cases, actors and systems. This has been used for the project to highlight functionality and relationships between the potential users (travellers) and the online scrapbooking system.

3.2.2 Class Diagram

The descriptions provided for use cases will use several terms related to the domain in which the system works, such as Home, Menu, Scrapbook, etc. We will need to define these terms and their relationships clearly. Therefore, a UML class diagram will be created; this is to provide an implementation-independent description of the types that are used in a system and passed between the different components. This is beneficial in terms of the project as a class diagram, as shown below, gives describes of the attributes classes town; what information and date will be saved to the database, using specific operations.

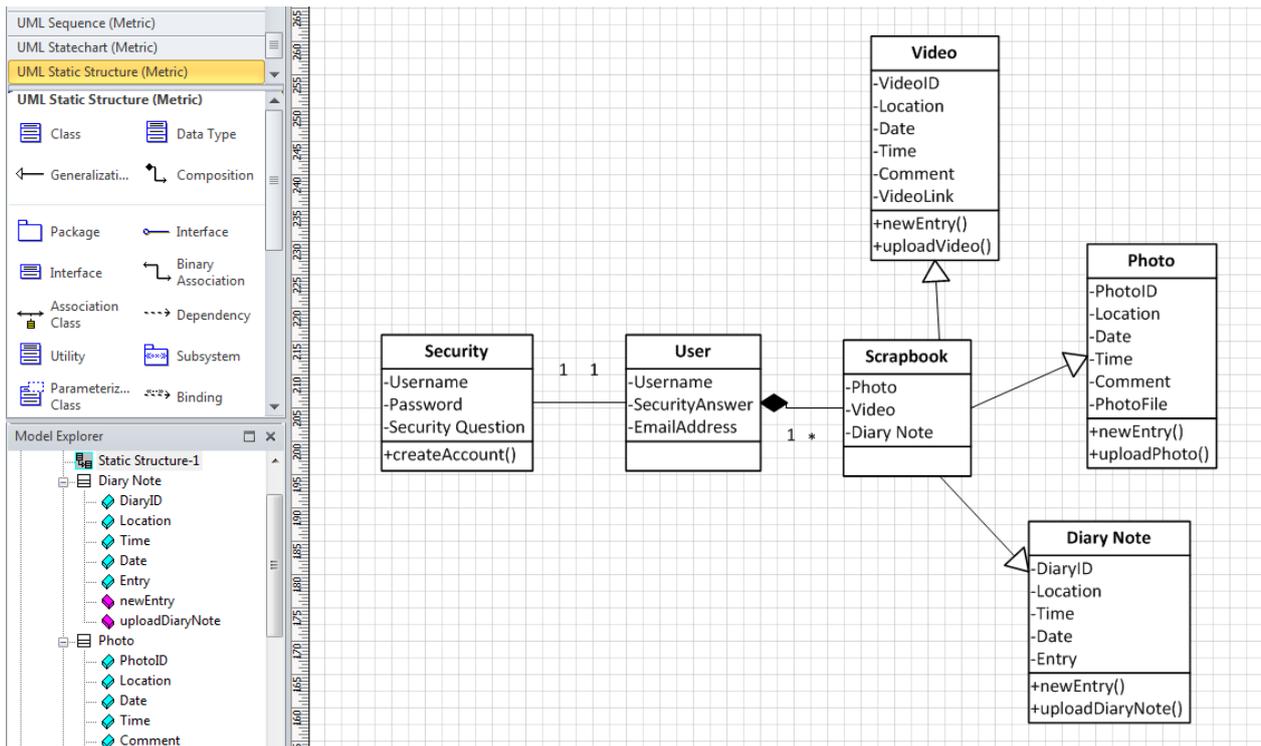


Figure 10 - Class Diagram

3.2.3 Functional Requirements

3.2.3.1 Navigation

The user interface should intuitively guide the user to the information they seek, including web functionality. The site should include the following navigation strategies:

[F1] A menu system as the primary navigation method of the site that is clear and always displayed on each page.

[F2] Hierarchical menu content divided into related functional areas based on the current site map, see Figure 6.

[F3] Each primary section of the website must have a main page where users can navigate to the sub items under the sections, but still be able to get back to the main home screen.

[F4]The user must be able to go back a step or exit the website at any time.

[F5] A menu system as the secondary navigation method of the site to be displayed on every page, including information about the website and contact details.

[F6] Adopt the use of colour and icon for each main function to increase usability and understanding.

3.2.3.2 Content

The content included within the site should be clear and concise; containing only relevant information for the user; this is to avoid wasted time and frustrated users. The site should contain the following content strategies:

[F7] Content included within the site is always clear and concise.

[F8] The terminology used all the way through the website must be understandable for all different users; technical and non-technical.

[F9] Any functional items such as buttons, navigational menu should contain titles that are iconic and easily recognisable.

[F10] The content used throughout the site should make users feel welcomed and attracted to the website.

[F11] Content must be regularly maintained and edited to ensure the most up to date information is displayed

[F12] Other content types, such as images, video or audio are to be correctly implemented.

3.2.3.3 Page Layout

Another important factor is the page layout; this involved creating and adopting an effective colour scheme, graphics and relaxed layout. Below are the requirements for the page layout:

[F13] Page layouts must be aesthetically pleasing and consistent; this involves each and every page of the website.

[F14] Any texts used throughout the website must be a suitable size for an improved reading ease and have a suitable font type.

[F15] The colour scheme must be attractive, reflect a positive emotion and easy on the eye.

[F16] The page must contain a button or icon for users to exit the system anytime.

3.2.3.4 Security

Website security is an important factor in terms of meeting user's needs. The security factors involve login, registering and storing data safely. The requirements are shown below:

[F17] The system must contain a login page to authenticate each account personal. [F17]

[F18] All password saved must be encrypted.

[F19] The website must include a secure registration page; with the addition to include a security question.

[F20] All content saved must be backed up.

3.2.4 Non-Functional Requirements

The non-functional requirements tend to focus more on constrains or restrictions that must be considered when designing the website. Non-functional requirements use simple language, are not ambiguous and focus on what, not how.

3.2.4.1 Reliability

[NF1] The system should be kept up to date in terms of content and contact details.

[NF2] The system should always allow the user to upload photos, videos and diary notes.

[NF3] The system should always allow the user to login using their personal details.

3.2.4.2 Usability;

[NF4] The system should be made easy for the user to simply login, select their scrapbook, upload media to the scrapbook, share the media if requested and exit the system.

[NF5] The system should not have more than two clickable levels of depth.

3.2.4.3 Security;

[NF6] Login and Password for the scrapbook system should be the same as the Facebook or Twitter login details.

3.2.4.4 Performance;

[NF7] The system should perform efficiently based on the bandwidth and web browser capabilities being used for the scrapbook system.

[NF8] The system should load the functionality within the scrapbook system instantly.

3.2.4.5 Portability

[NF9] The system should be simple enough to enable users to use the scrapbook site on the move.

[NF10] The system should allow users to login to their account across various platforms (e.g. different computers, mobile).

[NF11] The user must be able to access their account 24 hours a day, 7 days a week.

3.2.4.6 Standards;

[NF12] Any content being uploaded to the scrapbook system must be the correct file type and in a readable format to allow to users to preview and re download the content.

[NF13] Ensure the content is transmitted through HTTPS and FTP, this allows the content to be securely transmitted to the end user.

[NF14] The website must include copyright.

3.2.4.7 Software

[NF15] The system must have recent updates for web browsers such as Google Chrome, Mozilla Firefox and Safari.

[NF16] A form of digital rights management software needs to be installed within the system.

3.2.4.8 Hardware

[NF17] The online scrapbook should be made visible on all personal computers, operating system and website browsers.

[NF18] The system should be accessible on any device as long as it is connected to the internet.

3.3 Acceptance Criteria

Requirements validation is concerned with checking the final draft of a requirements document; functional and non-functional requirements. The acceptance criteria allow us to individually check each requirement against its acceptance criteria; defining how each requirement is achievable from a user's perspective. In addition to this, it is essential to create this list because it ensures the functionality is performing how it is intended to. The full list of acceptance criteria can be seen in the Appendix, section 9.2.

4.0 Design

The Design process involves creating medium-fidelity prototypes to ensure a clearer picture of the system is presented. As mentioned in '2.4 Design Methods'; the tool used to create these prototypes is Balsamiq mock-ups. An advantage to creating mock-ups is the use of being able to test the usability and point out potential flaws. For example; the first design created did not display the key functions of the system, so this had to be adopted and changed to ensure usability is at its highest possible value.

As you will see throughout the designs the layout has attempted to portray an F-shaped pattern. The research undertaken by (Chapman, 2010) on Nielsen's study of skimming websites, suggests that users exhibited an F-shaped pattern when scanning website content. This is important to highlight in terms of the designs used.

4.2 Prototypes

Below are the prototypes of the Online Scrapbook.

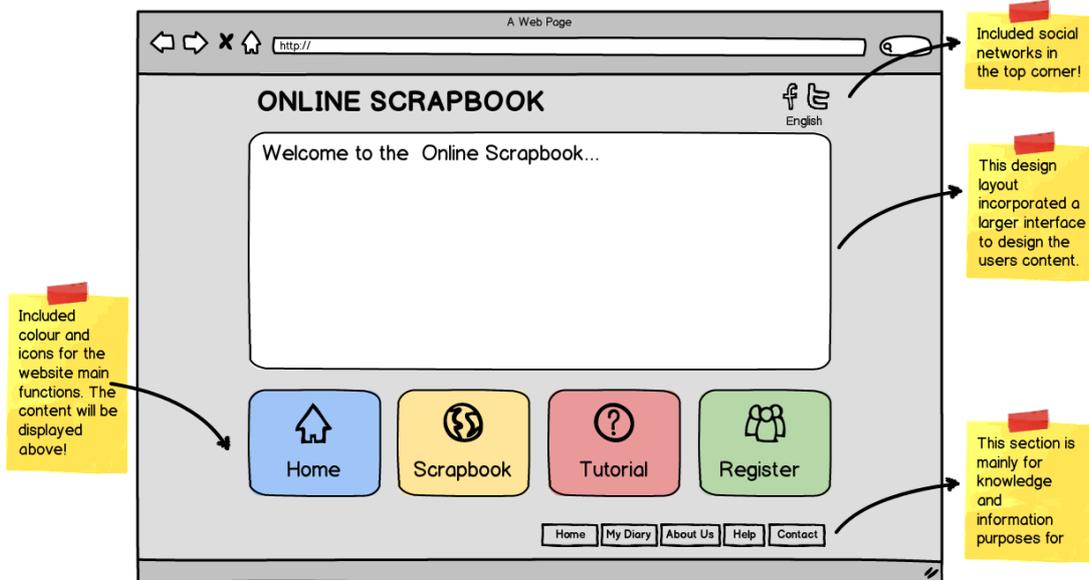


Figure 11 - Home Page

The screenshot above shows the 'Home Page' prototype of the system. This design benefits from a unique page layout, easy to read font and icons to better describe specific functions. We had decided to implement colour to ensure all users were able to visualise the key functions of the online scrapbook website. In addition to this, a secondary navigational menu has been included to allow a small group of potential users with the availability to access more information about the site; this included an 'About Us' page, 'Help' and 'Contact Us'.

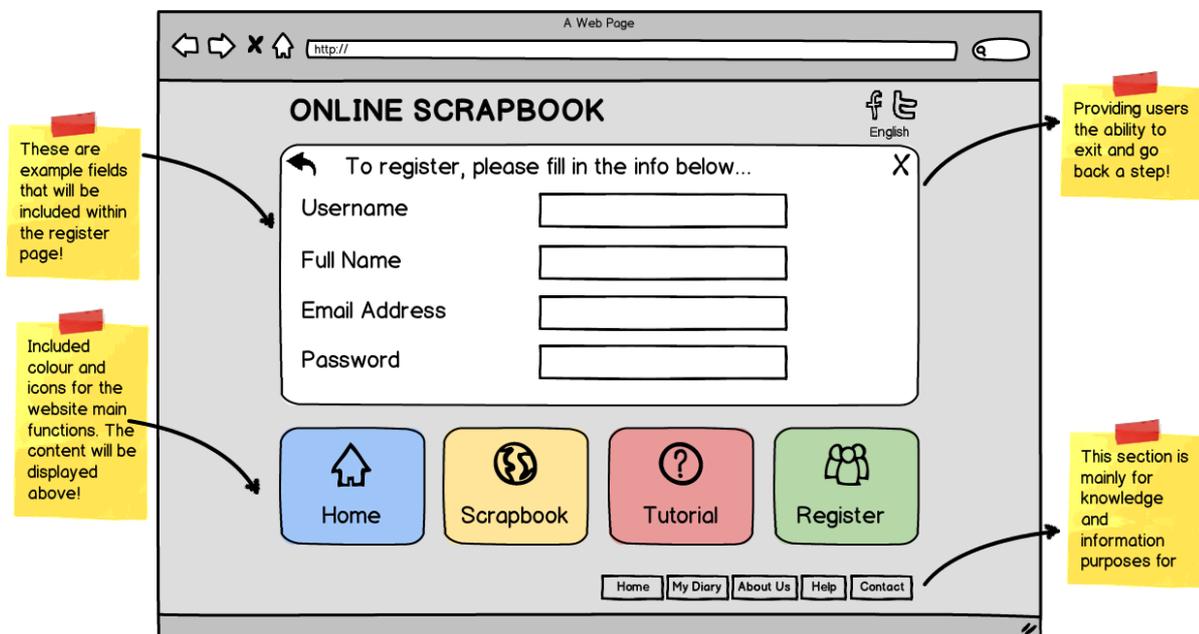


Figure 12 - Register Page

The container in the middle of this page is where all the functionality of the website is located. Depending on the button selected, the contained will increase in size or produce a different form to go with the corresponding function. For example; Figure 12 shows the 'Register' page; due to the fact the information required is not as detailed as other registration forms, there was no need to increase the space.

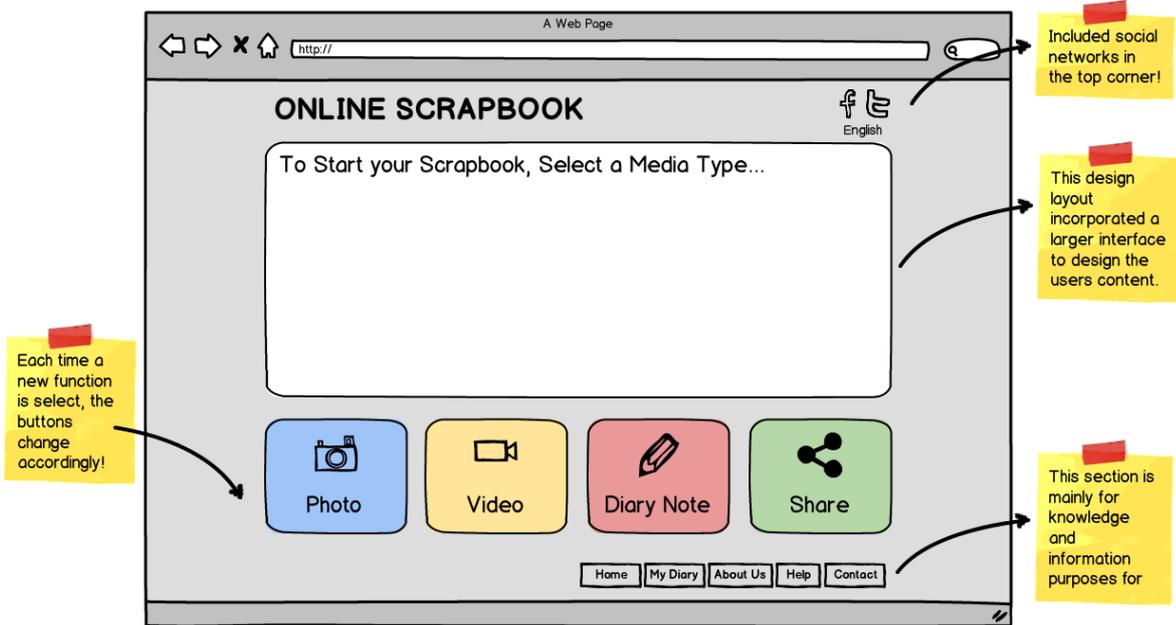


Figure 13 - Scrapbook Page

Furthermore, as seen in Figure 13, another key element of the site is the main navigation menu. As mentioned above the adoption of both colour and icons ensures users always maintain an understanding of what function they required. However, by select 'Scrapbook' the options change to allow increased functionality. A key requirement is to ensure the user can exit or go back a step any time. Figure 14 shows two icons which allow users to return to the previously screen or exit the system completely. In addition to this, we have included a home button located in the secondary navigational menu, just as a precaution.

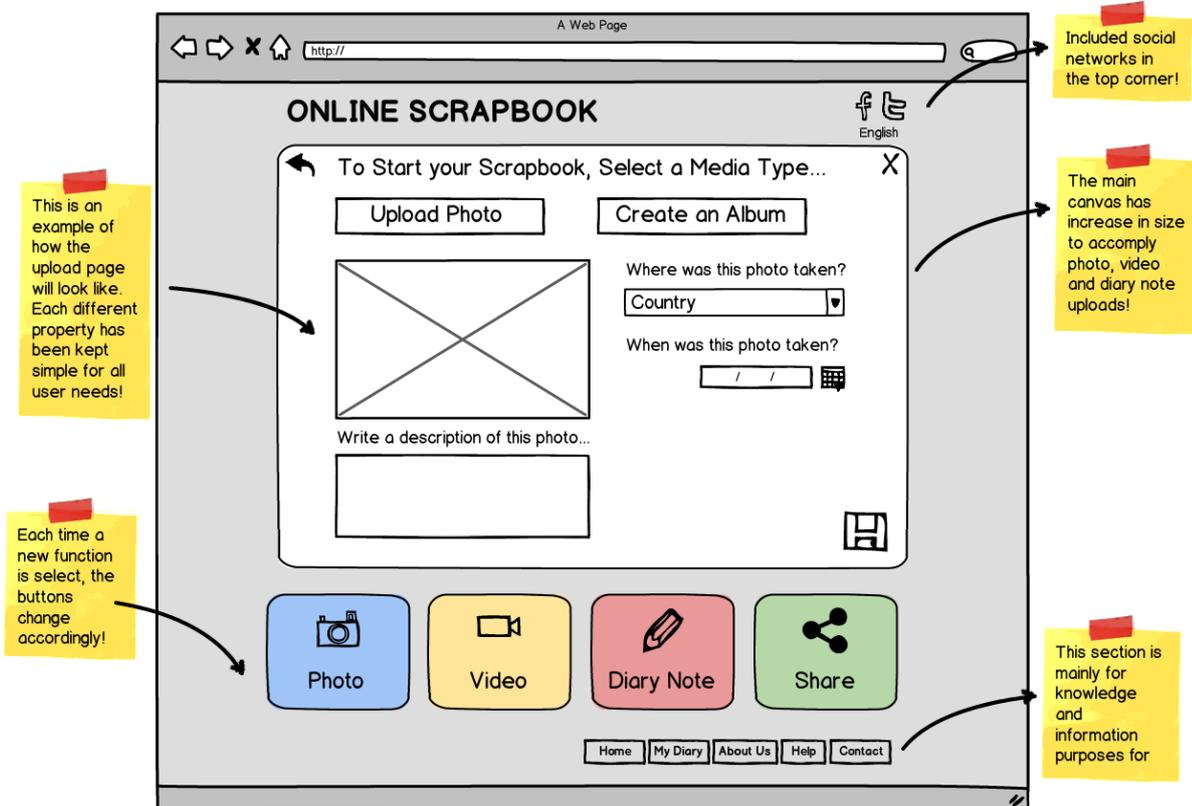


Figure 14 – Upload Page

As you can see from Figure 14, the website has been designed to use easily recognisable interfaces and controls. The media 'Upload' page resembles many social networking sites such as Facebook and Flickr, in terms of uploading media. This ensures that the user does not require a new skill set in order to use the site, and includes just the right amount of detail to meet their needs; ensuring an efficiently quick process.

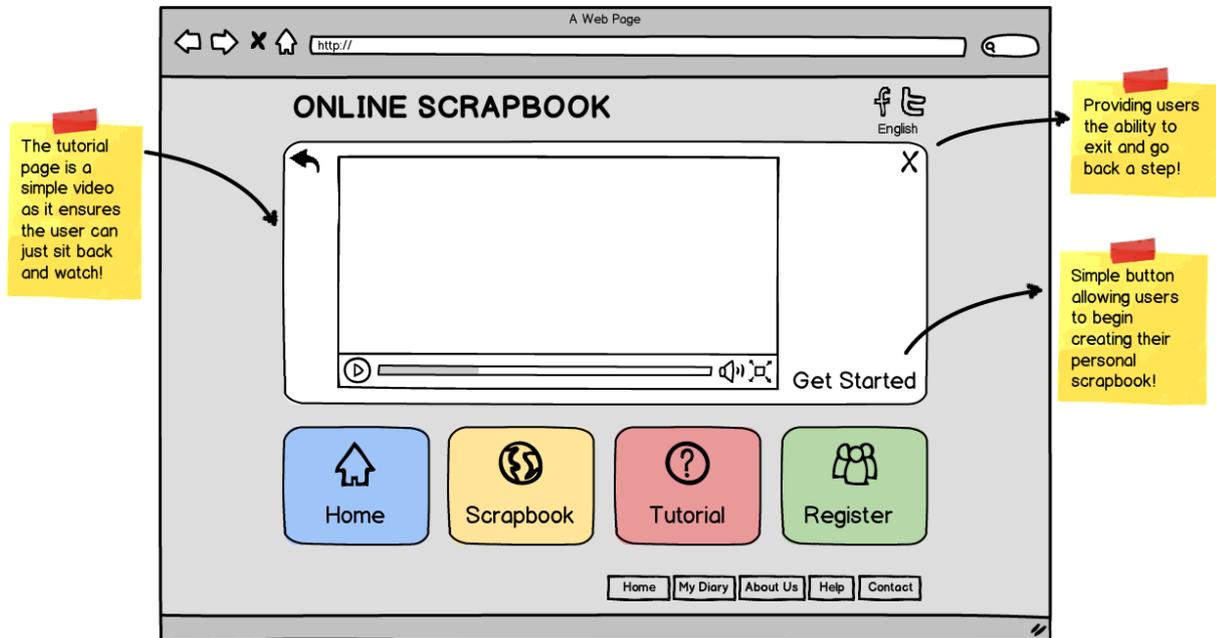


Figure 15 - Tutorial

Lastly, the designs for each page remain consistent. Each page contains both the primary and secondary navigational menus; allowing users to easily access the main functions of the website. In addition to this; the online scrapbook features social networking links as displayed in the top right corner of Figure 15. This allows the target audience; travellers with little time; to access all the sites they need whilst developing their online scrapbook.

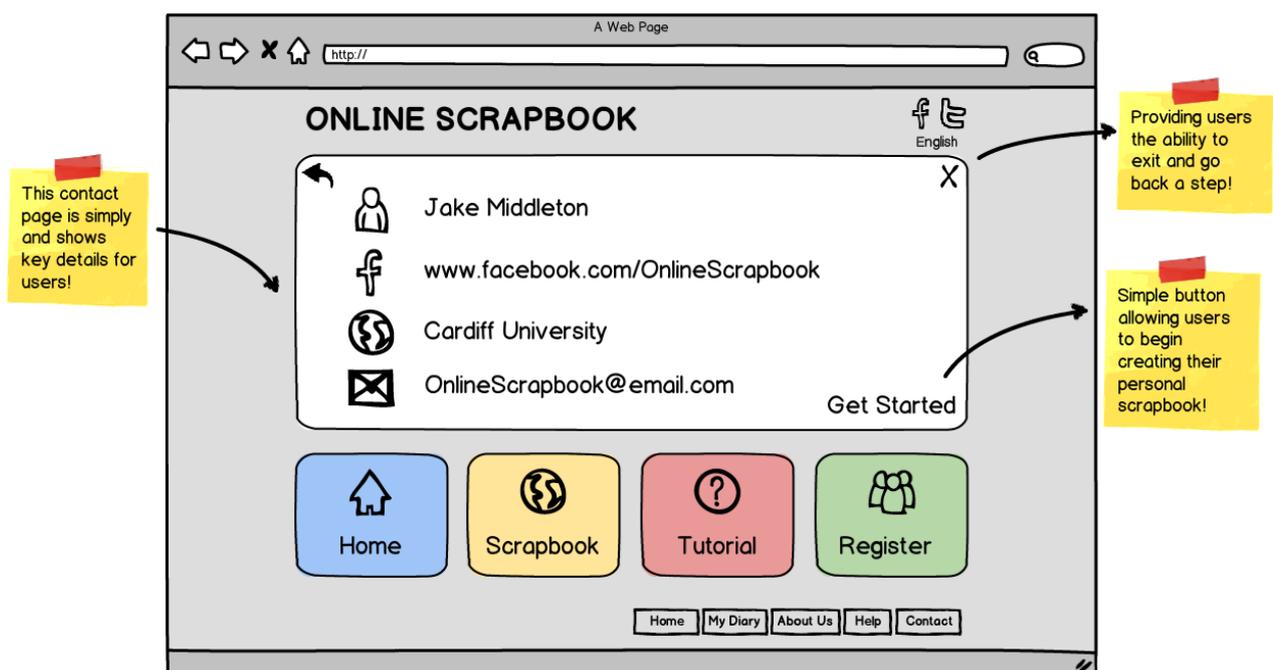


Figure 16 - Contact Page

5.0 Testing

Testing is a vital process of ensuring the finished application works correctly. All tests developed should be traceable to the user requirements; this is to ensure the system meets their needs. Testing involves validation; “are we building the right product?” and verification; “are we building the product right?” it is important to distinguish between the two in order to success in testing. Throughout this testing section; we have integrated the use of; validation and acceptance test cases, integration test cases and unit test cases. All implemented to ensure the system meets the needs of users, each component has been assembled correctly and to test any algorithms used.

5.1 Test Plan

The primary purpose of testing is to find an error within the website and to ensure this; the use of black box testing has been incorporated. Black box testing aims to derive a set of tests that fully exercise all functional requirements of the system. Below is the template to be used for the testing process throughout the final phase of this project.

Test Case ID:		Test Purpose:	
Environment:			
Pre-Conditions:			
Test Case Steps:			
Step Number:	Procedure:	Response:	Pass or Fail:
Comments:			
Related Tests:			
Author:		Checkers:	Date:

6.0 Evaluation

6.1 Usability Testing

Usability testing involves observing people use the system in simulated settings; such as on a set up desktop computer. The user is given a specific set of tasks to complete and the developer records observations, any problems areas, successes or aspects of the system that can be improved. This method of testing has been adopted to identify interface problems and will be used to test the final version of the website. Additionally, the questionnaires created will include a three point scale, as shown in (Chen & Singh, 2001) to be the most successfully in obtaining useful data.

Furthermore, adopting the think aloud method; the process in which users speak their thoughts whilst doing a task, allows the acquaintance of detailed opinions. This includes what they are trying to do, things they read, why they took a certain action, questions that arise in their mind, things they find confusing, how they interpret what the system did, and so on. This evidently provides an insight into what the user is thinking. There are four main areas of usability testing which will be measured, these are:

Efficiency; how much time and how many steps are required for users to complete basic tasks?

Accuracy; how many mistakes did each user make?

Recall; how much of the website does the user remember after the process?

Emotional Response; How does the user feel about the tasks complete and would the user recommend the right to others?

6.2 Future Work

As mentioned above, the future work contains undertaking system testing and usability testing. The test plan has been created early to ensure we are well prepared in terms of covering all aspects of the website, and that we can adopt a highly detailed testing process. The test plan will be included within the Final Report.

In addition to this, the main implementation will begin during the next phase. This initial phase involved creating design mock-ups and requirements; the next phase will involve implementing the website with the hope of creating a finished, successful system. With the use of the acceptance criteria, the website hopes to meet all potential users' needs.

Furthermore, the Final Report will be created and will contain everything that has been undertaken so far, such as; test results, the finished website system, requirements testing and a final conclusion. It is important that the planning for this section begin early, to ensure the final outcome as achievable.

Moreover, this is more focused on a future objective in terms of improving the Online Scrapbook. Throughout the designing and ‘thinking’ process, we have decided that the potential adoption of this new feature; as shown in Figure 17 could be very useful. This allows users to organise their media; such as photos, videos and diary notes into pages. Each page will contain capabilities to be previewed, edited, shared and deleted. However, at this present moment; achieving this objective is highly unlikely.

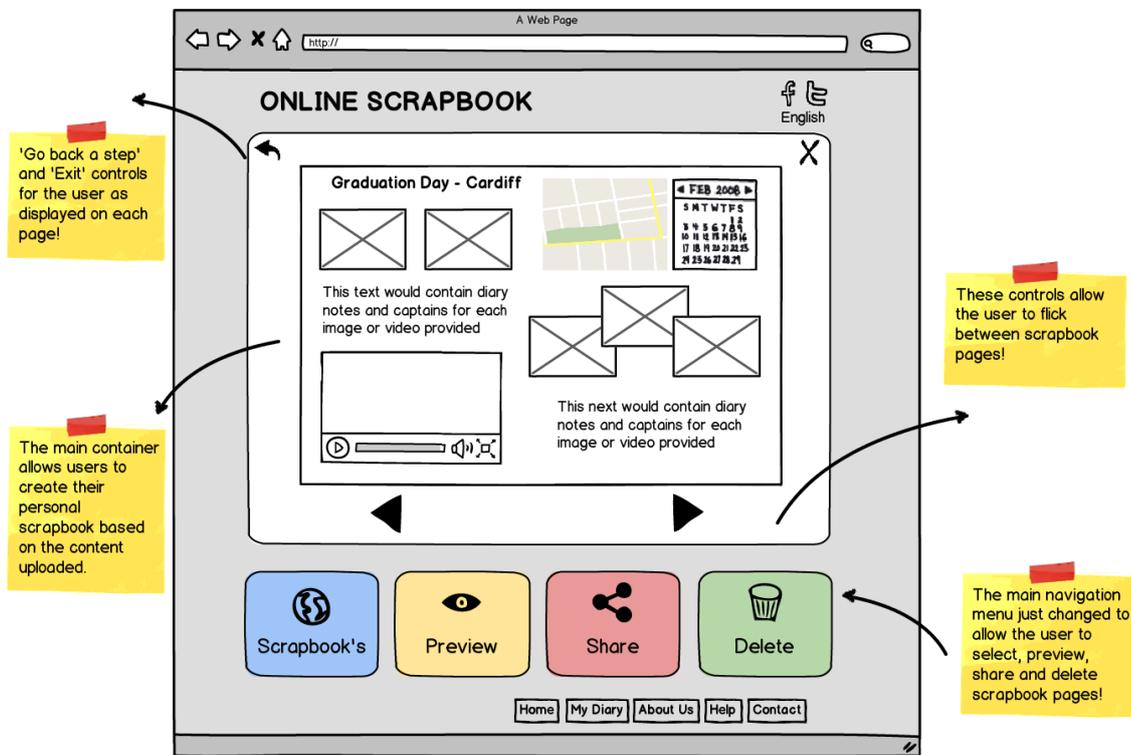


Figure 17 - New Feature

Lastly, this is a simple plan created for the Final Project to give details of what each section is about. The importance, as mentioned before, ensures we can spend more time on content and focus on producing a professional report.

Design	This will describe in brief terms what the project is about and what the final report contains. The introduction should also provide project scope, my approach and a broad summary of what I've aimed to achieve.
Implementation	The implementation section will contain information about how the Online Scrapbook was created; including full documentation of the final system. Additionally, any unforeseen problems will be included here.
Results Evaluation	This will mainly contain the results from my test plan and usability testing. The evaluation of these results will also be included, looking to achieve my set aims and requirements as defined in the Interim report.
Conclusion	A summary of the aims of this project and a restatement of the main results. The conclusion will also contain what has been learnt and what was achieved.
Reflection	This last section will contain a reflection on my performance throughout the project, what I have learnt that can be carried forward to future projects and how my methods solved the problem.

7.0 Conclusions

Throughout this report the aims and objectives have been a key reference point in order to maintain on track. These aims included creating a well detailed scrapbook; from the designs you are able to see the system is easy to use and allows future users the capability of adding photos, videos and diary notes. When creating the designs, a decision was made to keep the scrapbook as simple as possible; this is to ensure travellers are not wasting their time using over complicated systems. In addition to this, the report has achieved the secondary aim; ensuring the website has efficient usability. With the use of a simple navigational menu, the user can find content faster and without having to flick through several sub menus. The user is able to select media, upload this data to the scrapbook and logout; it is that simple.

The Interim Report has enabled the adoption of several new skills. Firstly, creating design mock-ups; previous experience was known, however, with the help of 'Balsamiq Mock-ups' we were able to create highly intuitive designs which best represents the future system. Furthermore, using 'Microsoft Visio' allowed us to develop wireframes for the designs; which will be included within the Final Report; but this was a new skill developed. Wireframes are simple representations of website designs; in other terms, 'blueprints' for your website. In addition, Visio was implemented to create UML diagrams; a skill that has been developed, to ensure we are able to highlight key functionality for the Implementation process.

Lastly, this report has achieved several objectives; one of those being the preparation for implementation; it has been an advantageous step in terms of creating a test plan and efficient designs. The designs will allow us to speed up the process of implementation and the test plan will allow us to keep a focus on achieving the requirements. Additionally, incorporating the use of usability testing will ensure the final system is off high professionalism and gains an insight into how future users will use the system. The next phase of the project is the final report and will contain the largest phase; implementation, testing and reflection.

8.0 Appendices

8.1 Acceptance Criteria:

Below is the Acceptance Criteria for the functional and non-functional requirements. Note: the corresponding [F] and [NF] number refers to the number of the requirement, section 3.2.

8.1.1 Functional

[F1] - The menu system must be displayed on every page either at the bottom, top or side. The layout and formatting of the menu system must be clear in terms of font size, font type and colour used.

[F2] - The menu navigational method must be laid out to form a representation of the site map; each main function must have its own clickable button. Any sub functions must be included underneath the main function.

[F3] – The website must contain a button to allow users to go back a step, exit the system or select a new main function. The primary navigation menu must be stored on every page. Sub items must be displayed clearly either under the main function selected or in another suitable way.

[F4] – The site must have an exit button located on every single page and an option to go back a step to the previous page.

[F5] – The site must contain another menu strip located at the bottom or top of the site including functions such as; contact us, about and help. This secondary menu strip must not distract users from the primary functions of the site.

[F6] – Any colours used must be easy on the eye for all potential users. The icons used throughout the system must be easily recognisable and fully represent the function it is trying to describe.

[F7] – The user can read all content; distinguish between titles and different sections with easy. The site should not contain any spelling or grammar mistakes.

[F8] – The user can read everything on the website and be able to understand or define each term used.

[F9] – The user should instantly understand what each button does through the use of titles. The system must contain popular titles to define each function.

[F10] – The site will contain words that encourage the user to use the site such as positive, motivational and encouraging terms.

[F11] – The system should include a date as to when the content was most recently updated.

[F12] – The user must be able to upload any and/or all photos and videos of various file types. In addition, the user must be able to add diary notes containing text, numbers and symbols.

[F13] – The user must feel excited when using the website. The user can view all content with ease and come back to the site after initial use.

[F14] – The user must be able to read all text ranging from titles, small print, subtitles, paragraph text, and so on. The font type must be one of high reading ease such as Times New Roman.

[F15] – The system should not contain any contrasting colours, reflect a negative emotion and cause the user pain.

[F16] – The user is able to select and exit the page at any time, on any page.

[F17] – The user can login to the page using registered credentials such as a username or password; the site must display content corresponding to the logged in user.

[F18] – The system must store passwords in the database in an encrypted form.

[F19] – The user must be able to create a personal login account; user and password, as well as a security question and answer. The system must also facilitate Facebook login credentials.

[F20] - The system should create backups after a certain time; including all user data such as photos, videos, diary notes; apart from passwords.

8.1.2 Non-Functional

[NF1] - The system should display a date on the site to show users the last data as to which the sites content was updated. All contact details must be correct and up to date at all times.

[NF2] - The user can add a photo or multiple photos (as well as videos and diary notes), upload these to the personal scrapbook, view the content upload and share to social networking web sites.

[NF3] – The user can efficiently log on to their user profile, upload their scrapbook or understand other functionality.

[NF4] – The system should contain clear buttons with very little clickable levels of depth; content should be instant and displayed on the home screen.

[NF5] – The system must contain all functionality on the home screen.

[NF6] – The system should allow the user to log in using their Facebook or Twitter username and password. Example log in pass and log in fails can be shown using the correct or incorrect password.

[NF7] – The system upload facility should efficiently upload content. The user should click on the upload content button after selecting the required photos, videos or diary notes. The speed of

the upload is based on the user's bandwidth and could potentially have an effect on how quickly this process takes.

[NF8] – The user should wait no longer than 1 to 2 seconds for any page to be displayed.

[NF9] –The user can use the systems full capability on their personal computer browser.

[NF10] – The system must be cross platform and the user can log in successfully regardless of the computers operating system or platform.

[NF11] – The user is able to log in at all times.

[NF12] – The system checks the upload file to ensure the content being uploaded is the correct file type (.jpg, .mov, etc.) and will reject the content if it is not in that particular file type.

[NF13] – The system needs to be checked to ensure all the correct transfer protocols are attached within the portal. When a user is accessing the site, the systems needs to ensure it is running through HTTPS. A trial test will be used to ensure the content uploaded is using FTP, ensure the most efficient and effective way of transferring the data from the site to the users machine.

[NF14] – The system must display some form of copyright on the home page.

[NF15] – The system will not load the content unless the user is using one of the more recent web browsers as mentioned within the requirements.

[NF16] – The system will not let any content be uploaded and available for this use until some form of DRM software has been attached.

[NF17] – The site can be used fully and content can be uploaded on any device.

[NF18] – The site can be fully accessible providing correct internet access is provided.

7. In terms of the following key features, please rate how they compare to similar websites, as provided below:

Excellent = 1

Average = 2

Poor = 3

Facebook

Usability	Uploading Content	Navigation	Page Layout	Help/Tutorial
_____	_____	_____	_____	_____

Instagram

Usability	Uploading Content	Navigation	Page Layout	Help/Tutorial
_____	_____	_____	_____	_____

MixBook

Usability	Uploading Content	Navigation	Page Layout	Help/Tutorial
_____	_____	_____	_____	_____

SmileBox

Usability	Uploading Content	Navigation	Page Layout	Help/Tutorial
_____	_____	_____	_____	_____

DigitalScrapbooking

Usability	Uploading Content	Navigation	Page Layout	Help/Tutorial
_____	_____	_____	_____	_____

8. In relation to the usefulness of the Online Scrapbook, I have found this to be:

High Medium Low

9. Overall, my impressions of the Online Scrapbook is:

Positive Average Negative

10. Would you like to make any other comment(s) about the Online Scrapbook?

The emoticons have been sources from (Vector.Us, 2011), all copyright belongs to the respected owners.

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10.0 Glossary

A

Acceptance Criteria – Specified indicators or measures employed in assessing the ability of a component, structure, or system to perform its intended function.

Algorithm – A step by step procedure designed to perform an operation, and which will lead to the required result if followed correctly. Algorithms have a definite beginning and a definite end, and a finite number of steps.

B

Bandwidth – The rate at which electronic signals can travel through a medium, such as a wire, channel or cable. Bandwidth may also be described as the width of the ‘pipe’ through which data travels. Technically speaking, it means the difference between two frequencies.

Black Box Testing – This is also known as functional testing; Black box testing is a software testing technique whereby internal working of the item being tested is not known by the tester. The tester does not examine the programming code; but only knows the inputs and what the expected outcomes should be.

C

Code – Term used to describe computer-ready data. Code is written computer instructions.

Component Testing – This involves the testing of individual components of a system.

Cross-Platform – The ability of a programming language that enables programmers to develop software for several competing platforms by writing a program only once. This includes operating systems and various browser types.

D

Database – A collection of information organized in such a way that a computer program can quickly select desired pieces of data. You can think of a database as an electronic filing system.

Desktop - a PC designed to be set up in a permanent location because its components are too large for easy transportation.

DRM– Digital Rights Management; class of access control techniques that are used by with the intent to limit the use of digital content and devices after sale.

E

Encrypt - To obscure the meaning of a message to make it unreadable.

F

Facebook – This is a type social networking service. This allows users to create a personal profile, add other users as friends, and exchange messages, including automatic notifications when events occur.

Flat-site Architecture – The architecture of a website is how a user or search engine can navigate through that website. Flat-site architecture involves a maximum of 1-2 click levels of depth.

FTP (File Transfer Protocol) – a protocol used for file transfer from computer to computer across the Web.

G

Google Maps API – This is a technology which allows a developer to incorporate the use of Google Maps within their system. API stands for application programming interface.

H

HTML (Hypertext Mark-up Language) – a standardized hypertext language used to create World Wide Web pages and other hypertext documents.

HTTPS (Hypertext Transfer Protocol Secure) – a set of rules for fast retrieval and transmission of electronic documents written in HTML over a secure connection. This is different from HTML because they encrypt and decrypt user pages to prevent unauthorized access to sensitive data.

I

Instagram – Is a social network and photo-sharing application that allows users to upload photos, and edit these photos through filters. Instagram allows users to follow other users and like photos.

Integration Testing- Is the phase in software testing in which individual software modules are combined and tested as a group.

iOS – The mobile operating system owned and created by Apple.

M

Mock-Ups - Model or replica of a system built full-size or to scale for testing, demonstration, design evaluation or training purposes.

MySQL – Is an open source relational database management system and most commonly used for web applications. MySQL relies on SQL for processing the data in the database.

O

Online Scrapbook – The website to be created allowing users to upload content such as photos, videos and diary notes to a personal online journal.

OS (Operating System) – acts as a director and interpreter between the user and all the software and hardware on the computer.

P

Password - a string of characters that security systems use to authenticate, or verify, a user's identity. The security system will compare the password inputted to the password stored for the user account. Most operating systems store passwords when users create login accounts.

PHP (Hypertext Pre-processor) – a widely used open source general-purpose scripting language that is especially suited for web developed and can be embedded into HTML.

Prototyping – is a method of testing ideas and concepts for new products and services. A prototype is a small scale mock-up of a product, or a test run of a service, created to explore its viability and usability as part of the development process.

R

Requirements – Can be functional and non-functional; a requirement is some quality or performance demanded of a service to test it meets the user's needs.

S

Site Map – Is an overview of the pages within a website. Site maps of smaller sites may include every page of the website, while site maps of larger sites often only include pages for major categories and subcategories of the website.

Social Network – Is the process of grouping individuals into specific groups. Social networking is possible in person, but is most popular online using sites such as Facebook, Twitter and LinkedIn. Social Networking sites function like an online community for internet users.

System Testing – is the process of performing a variety of tests on a system to explore functionality or to identify problems. System testing is mostly required before and after a system is put in place.

T

TCP (Transmission Control Protocol) – one of the main protocols in TCP/IP network; this enables two hosts to establish a connection and exchange streams of data. TCP guarantees delivery of data and also the order in which the packets were sent.

Twitter – Is an online social networking service and micro blogging service that enables its users to send and read text-based messages of up to 1540 characters, known as tweets. Twitter is one of the first online social networking sites to incorporate tagging; the process of allowing users to group posts together by topic or type.

Two-Dimensional Space – 2D space refers to the flat surface region of a drawing/painting upon which someone creates the artwork. 2D space is measured in two dimensions; width and height.

U

UML– stands for Unified Modelling Language; it is the general-purpose language in the field of object-oriented software engineering. It includes a set of graphic notation techniques such as Class Diagram and Use Case Diagram, to create visual models of object-oriented software.

Unit Testing – It is a testing method which verifies a ‘unit’, or the smallest piece of an application which is able to be tested.

Usability – “The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. Usability refers to methods for improving ease-of-use during the design process.” ((ISO), 1947)

Usability Testing – Is a method by which users of a product are asked to perform certain tasks in an effort to measure the product's ease-of-use, task time, and then user's perception of the experience.

Use Case Diagram – Is a graphical representation of a user's interaction with the system. A use case diagram can portray the different types of users of a system and the various ways that they interact with the system.

User Satisfaction – Is the attitude of a user to the computer system he/she employees in the context of the work environment or application.

V

Validation – “Are we building the right product?”

Validation and Acceptance Testing – A more formal method of testing conducted to determine whether a system satisfies its acceptance criteria and thus whether the customer should accept the system.

Verification – “Are we building the product right?”

W

W3C – Is a website validator that helps check the validity of web documents.

Web Browser – is a client to a web server that allows the user to read HTML documents on the World Wide Web.

White Box Testing – This uses specific knowledge of programming code to examine outputs. The test is accurate only if the tester knows what the program is supposed to do.

Wireframe – This is a visual guide that represents the framework of a website. These are created by website designers for the purpose of arranging elements to best accomplish a particular purpose.