SCHOOL OF COMPUTER SCIENCE & INFORMATICS

COURSEWORK ASSESSMENT PROFORMA

MODULE: CM3301 Software Engineering Project (Individual Report)

DATE SET: Sunday 15th November 2015

SUBMISSION DATE: 23.59pm Friday 6th May 2016

SUBMISSION ARRANGEMENTS:

Submission as detailed in the table below via Learning Central

TITLE: Individual Report

This coursework is worth 75% of the total marks available for this module. The penalty for late submission is an award of zero marks. You will also be expected to attend a project viva which will be scheduled in the Spring examination period.

Description	Type	Name
Individual Report - Compulsory	One PDF (.pdf) file	[studentname]_Report.pdf
Appendix files - Optional	PDF or Zip files	[studentname]-Appendix[N].pdf or [studentname]-Appendix[N].zip

LEARNING OUTCOMES ADDRESSED:

- Participate in a substantial Software Engineering team project and take sole responsibility for developing a non-trivial part of the resulting system.

- Understand the elements of a successful Software Engineering project.

- Show an appreciation of best practice in solving Software Engineering problems.

- Exhibit a sound knowledge in the subject area related to the project;

- Demonstrate in-depth understanding of the technologies and methodologies used in the project.

- Understand group dynamics associated with the development of non-trivial software systems.

SKILLS (practised and developed):

- Critically evaluate appropriate literature relevant to the project;

- Use appropriate tools, techniques and validation methods in developing solutions;

- Critically evaluate solutions and findings resulting from the project;

- Plan, organise and implement tasks within time constraints;

- Work effectively as a member of the team

- Work independently on their individual part of the project under the project supervisor's direction;

- Report, present and document the findings and deliverables resulting from the project;

- Gain an in-depth understanding of the state of the art related to the project's specific context;

- Apply appropriate practices, theory and technology to solving the problem;

- Develop solutions rationally using a disciplined approach agreed by the team

Individual Report

You must each submit an individual report at the end of the second semester worth 75% of your total mark. You will also have to submit a complete set of the deliverables that you developed for your part of the project including any models, test cases and source code. The individual report is marked by your supervisor and moderator.

Structure and Contents

We would expect the main body of the final report to be approximately 12,000 – 15,000 words and should not exceed 20,000 words. This report builds on the team report. The report should not repeat the contents of the team report, but may refer to it and expand on it.

The report should include:

- an introduction to the project including a summary of your agreed individual responsibilities;

- detailed design and any further analysis of the problem specifically relating to your part of the project;

- a discussion of the development of your part of the project covering implementation and how this integrates with the rest of the team;

- discussion of the testing used at a team and individual level, e.g. validation, unit testing, integration and systems testing;

- an evaluation of the product and process at a team and individual level;

- an analysis of the team dynamics and a reflection on what you have personally learnt from carrying out the project;

- conclusions and future work.

Marking Criteria

Your supervisor and moderator will mark your report according to the following criteria:

- Solution to the problem

    o   Originality / Suitability and Scope of Solution

    o   Testing and Validation

    o   Quality of Product and Deliverables

    o   Discussion and Justification of the Process

- Evaluation, Reflection and Conclusions

    o   Evaluation of the Product

    o   Evaluation of the Process

    o   Analysis of Team Dynamics

    o   Reflection on Learning

    o   Conclusions & Future Work

- Communication skills

    o   Written communication skills

    o   Oral communication skills (Viva)

CM3301: Individual Report

Student:

Solution to the problem *(Student's Part of the Project)*

Originality / Suitability and Scope of the Solution

● **Excellent:** Develops a significant solution for their part of the system that demonstrates innovation and creativity in solving the problem and/or provides an impressive and highly suitable solution with wide-ranging scope.

● **Good:** Develops a good solution for their part of the system that shows some innovation and creativity in solving the problem and/or demonstrates a suitable solution with a good scope

● **Satisfactory:** Develops an adequate solution for their part of the system with sufficient scope.

● **Poor:** Solution for their part of the system is inadequate with insufficient scope

Testing and Validation

● **Excellent:** Solution has been tested and validated effectively to clearly show to what extent the student's part of the product meets or exceeds the functional and non-functional requirements of all relevant stakeholders

● **Good:** Solution has been tested and validated well to show the extent that the student's part of the product meets most of the appropriate requirements

● **Satisfactory:** An adequate amount of testing has been carried out to show the extent that the student's part of the product meets a reasonable number of requirements

● **Poor:** Insufficient testing has carried out to determine the extent that the student's part of the product meets requirements

Quality of Product and Deliverables

● **Excellent:** Provides a comprehensive and professional set of product deliverables (models, source code, test cases etc.) for a significant individual part of the team project, which are highly appropriate for the development approach used. Product successfully incorporates several software product quality characteristics (e.g. usability, maintainability, security, interoperability, reliability, efficiency).

● **Good:** Provides a reasonable set of good quality product deliverables (models, source code, test cases etc.) for a significant individual part of the team project, which are appropriate for the development approach used. Product has reasonable consideration of some software product quality characteristics (e.g. usability, maintainability, security, interoperability, reliability, efficiency).

● **Satisfactory:** Has an adequate set of product deliverables of reasonable quality

● **Poor:** Provides insufficient product deliverables or product deliverables of poor quality

Discussion and Justification of the Process

● **Excellent:** Provides an insightful and informative *discussion* of the process of developing the solution with good justification of the tools/techniques and the choices made in developing the solution. Makes extensive use of the subject literature and/or best practice to underpin choices and decisions made. Shows good awareness of legal/ethical/professional/social issues where relevant.

● **Good:** Provides a good *discussion* of the process of developing the solution with reasonable justification of the tools/techniques and the choices made in developing the solution. Includes some reasonable use of the subject literature and/or best practice to underpin choices and decisions made.

Shows some awareness of legal/ethical/professional/social issues where relevant.

- **Satisfactory:** Provides a reasonable *description* of the process of developing the solution

- **Poor:** Provides an inadequate *description* of the process of developing the solution

Evaluation, Reflection & Conclusions

Evaluation of the Product

- **Excellent:** An effective and insightful critical evaluation of the whole product has been provided to provide comprehensive coverage of the strengths and limitations of the solution system

- **Good:** A good evaluation of the whole product has been provided to show the main strengths and limitations of the solution system

- **Satisfactory:** A reasonable evaluation of the product has been provided to show some strengths and limitations of the solution system

- **Poor:** An inadequate evaluation of the product has been provided

Evaluation of the Process

- **Excellent:** An effective and insightful critical evaluation of the process has been provided to provide a comprehensive discussion of the effectiveness of the tools/techniques and the choices made by the team and the student for each phase/iteration of the whole project.

- **Good:** A good evaluation of the process has been provided that discusses the effectiveness of the tools/techniques and the choices made by the team and the student

- **Satisfactory:** A reasonable evaluation of the process has been provided to show some awareness of tools/techniques/choices made

- **Poor:** An inadequate evaluation of the process has been provided

Analysis of Team Dynamics

- **Excellent:** Provides an interesting and insightful analysis of the dynamics of the team in carrying out the whole project. A comprehensive discussion is provided that clearly shows how the student's experience compares or contrasts with key literature on promoting teamwork.

- **Good:** Provides a good analysis of the dynamics of the team in carrying out the project. Good discussion is provided that gives several examples of how the student's experience compares or contrasts with key literature on promoting teamwork.

- **Satisfactory:** Provides some reasonable analysis of the dynamics of the team in carrying out the project. Some examples are provided of how the student's experience compares or contrasts with literature on promoting teamwork.

- **Poor:** Provides inadequate analysis of the dynamics of the team in carrying out the project. Little/no examples provided of how the student's experience compares or contrasts with literature on promoting teamwork.

Reflection on Learning

- **Excellent:** Provides an interesting and insightful reflection on what the student has learnt from the project in terms of how this has developed their subject specific and transferable skills

- **Good:** Provides good reflection on what the student has learnt from the project in terms of how this has developed their skills

- **Satisfactory:** Provides reasonable discussion of what the student has learnt from the project

- **Poor:** Provides inadequate discussion of what the student has learnt from the project

Conclusions & Future Work

- **Excellent:** Provides well thought-out conclusions with a comprehensive set of interesting and insightful ideas for future work

- **Good:** Provides good conclusions with a good set of appropriate ideas for future work

- **Satisfactory:** Provides reasonable conclusions with some appropriate ideas for future work

- **Poor:** Conclusions are inadequate with little/no ideas for future work

Communication Skills

Written Communication Skills

- **Excellent:** Report was well written in an engaging style and was structured effectively. Sources are referenced correctly & consistently using CU Harvard Style

- **Good:** Report was nicely written and structured well. Most sources are referenced using a consistent style.

- **Satisfactory:** Report was written in a reasonable style

- **Poor:** Report was poorly written

Oral Communication Skills (Viva)

- **Excellent:** Student gave insightful and appropriate responses to questions and discussions in the viva.

- **Good:** Student gave good responses to questions and discussions in the viva.

- **Satisfactory:** Student gave reasonable responses to questions and discussions in the viva

- **Poor:** Student gave inadequate responses to questions and discussions in the viva

Feedback for Learning:

Mark: ____/100% (worth 75% of the mark for the module)

Name:

Supervisor/Moderator: