

Cardiff School of Computer Science and Informatics
Coursework Assessment Pro-forma

Module Code: CM1202

Module Title: Developing Quality Software

Lecturer: Helen Phillips

Assessment Title: Individual Report - to evaluate techniques & reflect on learning

Assessment Number: 4

Date Set: Monday 4th March 2019

Submission Date and Time: *Wednesday 8th May 2019* at 9:30am.

Return Date: End of Examination Period via Learning Central

This assignment is worth **40 %** of the total marks available for this module. The penalty for late or non-submission is an award of zero marks.

Your submission must include the official Coursework Submission Cover sheet, which can be found here:

<https://docs.cs.cf.ac.uk/downloads/coursework/Coversheet.pdf>

Submission Instructions

The coursework coversheet should include your student number and at the end of your report please add the self and peer contribution report for yourself and the other people in your team. Your individual report should be submitted, as a **single pdf document**, via Learning Central by 9:30am on Wednesday 8th May. (Use your student number as part of the name of the file). If you have any difficulties submitting via Learning Central you **MUST** e-mail the module leader **Helen Phillips** (PhillipsHR@cardiff.ac.uk) at least half an hour before the deadline time.

Description		Type	Name
Individual report Including Cover sheet and Self / peer appraisal of team.	Compulsory	One .pdf file	[student_number]_report.pdf

Any deviation from the submission instructions above (including the number and types of files submitted) may result in a mark of zero for the assessment or question part.

Assignment

Task in summary

You need to write an individual report that

- Evaluates techniques used in developing your prototype and reflects on personal achievements and learning gained from your experience having undertaken the team exercise for module CM1202 Developing Quality Software.

You will be expected to reference lecture materials and refer to your team experience to produce an individual reflective report,

- which critically analyses the effectiveness of yourself and the team,
- and evaluates the various techniques used in each stage of the development process.

Your report needs to cover the following sections

- Team Evaluation (Approx. 600 words)
 - Select the **most appropriate** team dynamics theory covered in the module and **evaluate** your team's experience against that theory, using examples to compare and contrast.
 - **Identify** one barrier to team working that your particular team encountered and **discuss the strategy** used to overcome it.
- Managing the Software development progress (Approx. 600 words)
 - **Evaluate** the effectiveness of your team's project management, risk management strategies and version control.
 - You were introduced to several different techniques during the development of this piece of software (e.g. use case descriptions, class diagrams, test cases). Which technique did you find most beneficial for producing quality software. **Give justification for your answer.**
- Quality Criteria (Approx. 700 words)
 - Using two examples, highlight how and where **your part** of the final product took into consideration quality criteria (e.g. usability, reliability, maintainability).
- Contribution
 - Self and Peer appraisal of contribution of all team members.

NOTE In most of these sections we will be expecting you to link theory to your experience.

You should not include the names of individuals in the team but you may discuss how behaviours, problems and actions experienced in the team promoted or hindered effective teamwork.

Your individual report excluding the Peer and Self appraisal should be no more than 7 pages. The documentation should be word-processed. Use 12 point font size for the main text, and 1.5 line spacing.

Weightings

1. Team organisation	10
2. Managing the software development process	15

3. Quality Criteria	15
4. Peer/self-appraisal forms	5
5. Presentation, including referencing	5
Total	/50

Learning Outcomes Assessed

- Understand the importance of basic Software Engineering concepts, principles and practices
- Show an understanding of how to plan and manage a project through the effective use of a variety of tools and techniques
- Gain an appreciation of how the main stages in the software development lifecycle contribute to the development of a high-quality software system by performing key technical tasks from each stage of the project
- Evaluate techniques used in project management and the technical tasks involved in each stage of the development lifecycle
- Demonstrate an awareness of the nature of professional bodies and relevant codes of ethics and professional conduct
- Reflect on your experience of working in a team and your individual contributions to the project
- Professionally record and document the results of Software Engineering development work

Criteria for assessment

Student ID: _____ Mark _____

Team organisation /10	
Excellent 8-10	<ul style="list-style-type: none"> • Comprehensive and proficient discussion of how experience undertaking the team project relates to one of the team theory topics covered on the module • Comprehensive range of excellent examples are provided to compare or contrast theory and practice • Comprehensive and proficient evaluation of barriers to team working
Good 6-7	<ul style="list-style-type: none"> • High Quality discussion of how experience undertaking the team project relates to one of the team theory topics covered on the module • Good range of examples are provided to compare or contrast theory and practice • High Quality evaluation of barriers to team working
Adequate 4-5	<ul style="list-style-type: none"> • Reasonable discussion of how experience undertaking the team project relates to team theory covered on the module but the theory selected was limited. • Reasonable set of examples are provided to compare or contrast some theory and practice • Some evaluation of barriers to team working
Poor 0-3	<ul style="list-style-type: none"> • Little/no discussion of how experience undertaking the team project relates to the theory covered on the module • Few/ no examples are provided to compare or contrast theory and practice • Little / no evaluation of barriers to team working

The software development process / 15	
Excellent 12-15	<ul style="list-style-type: none"> Comprehensive evaluation of the effectiveness of the project management, risk management, and version control activities with excellent justification Proficient evaluation of the usefulness of selected technique used during the software development process
Good 9-11	<ul style="list-style-type: none"> Good evaluation of the effectiveness of the project management, risk management, and version control activities with significant relevant justification Good evaluation of the usefulness of selected technique used during the software development process
Adequate 6-8	<ul style="list-style-type: none"> Some evaluation, including justification, of the project management, risk management, and version control activities carried out however more a description than an evaluation. Limited evaluation of the usefulness of selected technique used during the software development process
Poor 0-5	<ul style="list-style-type: none"> A description rather than an evaluation of the project management, risk management, requirements management and version control activities carried out by your team Little / no evaluation of the usefulness of techniques used throughout the software development process

Quality Criteria / 15	
Excellent 12-15	<ul style="list-style-type: none"> Two very relevant examples of features that demonstrate quality code, and a clear explanation of how quality is enhanced.
Good 9-11	<ul style="list-style-type: none"> Two relevant examples of features that demonstrate quality code and explain how quality is enhanced.
Adequate 6-8	<ul style="list-style-type: none"> Only one relevant example discussed that highlights quality criteria
Poor 0-5	<ul style="list-style-type: none"> Failed to provide many relevant examples of features that could address the different quality criteria

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Self and peer appraisal forms / 5	
Excellent 5	<ul style="list-style-type: none"> Comprehensive evaluation, including justification of the contributions made by all team members
Good 4	<ul style="list-style-type: none"> Good evaluation, with justification of team member's contributions.
Adequate 2-3	<ul style="list-style-type: none"> Professional comments made regarding team members contribution but the justification is minimal. (All, Some forms)
Poor 0-1	<ul style="list-style-type: none"> Comments have been made regarding the contribution of team members but these were not well justified or particularly professional.

Report Presentation and referencing / 5	
Excellent 5	<ul style="list-style-type: none"> Writing style is fluent Report is well structured and is professionally presented Clear and accurate referencing
Good 4	<ul style="list-style-type: none"> Writing style is good Report has a good structure and is well presented Most referencing is clear and accurate
Adequate 2-3	<ul style="list-style-type: none"> Writing style is reasonable Some structure to the report and it is reasonably presented Referencing had been attempted but is not correct
Poor 0-1	<ul style="list-style-type: none"> Poor writing style Little or no structure to the report and it is poorly presented No referencing

Comments

Feedback and suggestion for future learning

Feedback on your coursework will address the above criteria. Feedback and marks will be returned at the end of the Spring Examination Period via Learning Central as an attachment. Feedback from this assignment will be useful for your Second and Final Year projects.