

PA2515 Applied Software Project Management

Individual Report Assignment

Instructions

Answer all 5 questions.

Marking: As a guide to what is expected in your answers, the marking criteria are explained after each question. Each question has a total of 20 marks available. ***Please use the marks available for each part of a question as a guide to how much content is expected.*** To obtain a passing grade for the report, your total mark must be 50% or more, and additionally you must obtain a mark of 50% or more for Question 5 (because this question is a reflection on *your* role in the project). Note that reports in which a reasonable attempt has not been made to answer all five questions will not be marked but will be assessed as failed.

Submission: Submit your report as a single PDF via itslearning.

Report Format: To assist us in marking, please adhere to the following format:

- the page size must be A4 and use a legible font size (11pt size or larger) and page margins (2cm or more)
- the title page must include your name, acronym, your project team number, the course name ("PA2515 Applied Software Project Management"), and the assignment name ("Individual Report")
- begin the answer to each of the five questions on a new page
- the answer to each question must not be more than two pages long (any text after the second page will be ignored when marking)
- you must clearly indicate when you begin answering each part of a question (for example, you might use a sub-heading that specifies the question part, such as "2.3")
- you may additionally include a list of references as one or more extra pages
- you may **not** include additional material, for example, as appendices (any such material will be ignored when marking)
- your report must therefore consist only of:
 - a title page (1 page)
 - your answers to the questions (a maximum of 10 pages in total)
 - a list of references (1 or more pages)

Collusion: The answers in your report must be decided upon and written by you only. This is not a group assignment.

Plagiarism: As for other written assignments, you must not plagiarise material. Content that is derived from other sources (including other documents that you have written yourself or as part of the team) must be put into your own words or clearly presented as a quote, and in both cases the original source must be referenced appropriately.

Question 1 - Project Development Methodology

1.1 Describe the project development methodology (also called a “lifecycle model”) your team used for the project.

1.2 Why did your team choose this methodology?

1.3 What role does the customer **normally** perform in your chosen development methodology?

1.4 Your customer for this particular project was not defined by me, so who did your team identify as a customer and how were they involved in your methodology?

1.5 What do **you** think are the strengths and weaknesses of the chosen methodology? Justify your answer using examples from your experience of participating in this project.

1.6 Would **you** use the same development methodology for a similar software project in the future?

If **yes**: why is the methodology better than alternative methodologies that could be used?

If **no**: what methodology would you use instead, and why?

Marking criteria:

- 1.1 the description clearly explains all the important aspects and so demonstrates an understanding of the methodology [4 marks]
- 1.2 the explanation for the team's choice is convincing and consistent with the project plan [2 marks]
- 1.3 the role described for the customer is consistent with the chosen methodology [2 marks]
- 1.4 the answer explains clearly who the team identified as the customer for this project and the important interaction with this customers that are consistent with the methodology [2 marks]
- 1.5
 - *both* strengths *and* weaknesses of the methodology are provided, and are convincingly related to the characteristics of the methodology [4 marks]
 - the arguments are supported by the student's personal experience from the project [2 marks]
- 1.6
 - a clear yes/no answer [1 mark]
 - [3 marks] for one of:
 - **YES**: alternative methodologies are discussed briefly and the advantages of the chosen methodology explained by reference to these alternatives
 - **NO**: the arguments for applying a different development methodology demonstrate an understanding of the proposed alternative methodology and how it would resolve issues encountered by the team during this project

Question 2 - Monitoring and Control

In this question, your answers should consider *both* schedule management (i.e. when each task was completed) *and* effort management (i.e. the work required to complete each task). You can interpret the word “plans” in the question as referring to your initial project plans, ongoing revised plans, and/or shorter-term plans (e.g. for “sprints” or “iterations”).

2.1 What processes, methods, and tools did your team use to measure and track progress during your project?

2.2 To what extent did your team’s actual progress on the project deviate from your team’s plans?

2.3 What do **you** think were the reasons for these deviations? Justify your answer.

2.4 What actions did your team take as a result of these deviations? Explain why these particular actions were taken.

2.5 As a result of your experience on this project, what would **you** do in future projects to measure, control, and react to deviations between actual and planned progress? Explain your answer.

Marking criteria:

- 2.1 description of process, methods, and tools (suitably referenced where appropriate) is comprehensive and consistent with the chosen project development methodology (where the processes etc. differ from those proposed in the initial project plan, the reason for these differences are explained) [4 marks]
- 2.2 deviations from plans are discussed using quantitative examples [4 marks]
- 2.3
 - proposed causes of the deviations are convincingly argued [2 marks]
 - causes of the deviations are related to the student’s experience of the project (rather than being generic) [2 marks]
- 2.4 actions taken as a result of detecting deviations are clearly described and motivated [4 marks]
- 2.5
 - proposals demonstrate an understanding of techniques for measuring and tracking process [2 marks]
 - proposals are justified by the experience on this project [2 marks]

Question 3 - Risk Management and Quality Management

3.1 How did your team identify the risks to the project?

3.2 Did any of the risks anticipated in your project plan actually occur during the project?

If **yes**: what were these risks, and what actions did the team take to reduce the impact of them once they had occurred?

If **no**: what actions did the team take to minimize the chance that the risks identified in the project would occur?

3.3 Did any risks or challenges occur that were *not* anticipated in the project plan?

If **yes**: what were these risks, and why do *you* think they were not anticipated in the project plan?

If **no**: why do *you* think that your team encountered no unanticipated risks?

3.4 What criteria did your team specify for the quality of the software produced?

3.5 What processes, methods, and tools did your team use *both* to ensure *and* to assess the quality of the software?

Marking criteria:

- 3.1 a convincing discussion of how risks were identified by the team that is also consistent with the project plan [2 marks]
- 3.2
 - a convincing discussion of how *either* impact *or* chance of risk(s) were mitigated [4 marks]
 - the discussion is justified by examples from the project and referencing the mitigation strategies proposed the project plan [4 marks]
- 3.3 a well-argued analysis of why (un)encountered risks were or were not anticipated [4 marks]
- 3.4 a discussion of the quality criteria that is also consistent with the project plan [2 marks]
- 3.5 a comprehensive explanation that covers both ensuring and assessing quality [4 marks]

Question 4 - Project Team

Your answers to this question should focus on aspects of your team's performance that are related to the management of the project.

4.1 In what ways do **you** think your team managed the project well? In your answer, provide specific examples, and explain why you think your team was good at these aspects.

4.2 In what ways do **you** think your team could have managed the project better? In your answer, provide specific examples, explain what *you* think caused your team to perform less well on these aspects, and discuss what changes could have improved the team's performance.

Marking criteria:

- 4.1
 - comprehensive discussion identifying multiple aspects in which the team managed the project well [4 marks]
 - the discussion is supported by specific examples [2 marks]
 - convincing analysis as to why the team performed well on these aspects [2 marks]
- 4.2
 - comprehensive discussion identifying multiple aspects in which the team could have managed the project better [4 marks]
 - the discussion is supported by specific examples [2 marks]
 - convincing analysis of why the team performed badly on these aspects [2 marks]
 - changes proposed to improve the team's performance are practical and argued well [4 marks]

Question 5 - Your Role

5.1 Describe the roles that **you** performed in the project team.

5.2 Do **you** think these roles were the most effective use of your skills and knowledge? Justify your answer.

5.3 How did **you** contribute to the success of your team in terms of (a) managing the project; and, (b) building the software product?

5.4 If you were to perform the same roles on a similar project in the future, what would you do differently?

Marking criteria:

- 5.1 a clear and comprehensive description of the roles and responsibilities that the student had in the project, including how these roles changed during the project [4 marks]
- 5.2
 - a clear yes/no answer [1 mark]
 - a description of skills and knowledge used by the student (including those gained during the project) that relates these to the roles undertaken and justifies the answer [3 marks]
- 5.3
 - (a) multiple and specific examples of the contributions made by the student in terms of *project management* that also justify why these were beneficial to the team [4 marks]
 - (b) multiple and specific examples of the contributions made by the student in terms of *software development* that also justify why these were beneficial to the team [4 marks]
- 5.4 relevant suggestions as to how the student would execute these roles differently, justified by specific examples of how their contribution on the current project could have been improved [4 marks]