Case Study Presentation

Software Architecture

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Summary

In this assignment, you will be asked to demonstrate your ability to *understand*, *communicate*, and *critique* an architecture of an existing software project.

1. You will present the key information about the architecture of the project you documented in your case study assignment to your practical class.
2. This will include an updated critique of the architecture and any other relevant updates to the information originally provided in your report.

1 Introduction

You will give a presentation describing the project you selected for the documentation assignment. The intent is to give everyone in the course a broader view of how software architectures are used to solve problems. Your presentation should take advantage of what you have learnt in this course since you submitted your documentation report. This may allow you to provide a more insightful critique of the architecture or to provide a more accurate description of the project's architecture.

2 Presentation Content

You are free to structure your presentation however you wish, though you should use some form of slides to support the delivery of information. Your presentation needs to deliver the following content.

Title Slide Name of the software project, and your name and student number.

Introduction Describe the software project, explaining the its key functionality and target users.

Quality Attributes Describe the quality attributes of most importance to the project.

Context Provide an overview of the software system's context and its external dependencies.

Architecture Describe the software's architecture.

Critique Analyse the software's architecture, describing how well it delivers its ASRs[1].

Conclusion Highlight the key points or lessons learnt about the software's architecture.

Your presentation should introduce the software project. Give an elevator pitch style summary of what problem the project solves and its key features. Describe which quality attributes you think are most important for the project, and why. Describe the project's software architecture. Use appropriate views and notation to convey the important aspects of its architecture. Summarise your critique of the software architecture, highlighting how well it supports delivering the project's architecturally significant requirements.

Your audience is other students in this course. You may assume the audience has knowledge of the course content, though you should not assume they are familiar with the project you are describing.

[1] Architecturally Significant Requirements

2.1 Citations & References

You may cite references in your presentation to support the points you are making. These should be cited and referenced using the IEEE referencing style. The final slide(s) of your presentation should include the references to any cited material. You should display the reference slide(s) for about 3 seconds at the end of your presentation. You are not required to speak to the reference slides, aside from possibly thanking your audience for listening and stating these are your references.

3 Presentation

Presentations will take place in your practical class sessions during weeks 10 to 13. You will have a **maximum** of eight minutes for your presentation, plus three minutes for questions. There is no minimum time required for your presentation, it is up to you to determine when you have described all relevant information about the software architecture within your eight minute limit.

If your presentation exceeds eight minutes, the marker will ask you to stop your presentation. No content of your presentation past eight minutes will be marked.

4 Identity Verification

The presentation is an identity verified assignment. You must make your presentation in-person. The marked result of your presentation will be used to determine any caps applied to your grade. (That means a late penalty on the submission of your slides will not affect the mark used to determine a grade cap.) The first slide of your presentation **must** contain your full name, as recorded in UQ's student enrolment system, and student number.

4.1 Online Identity Verification

If you are presenting online, at the start of your presentation you **must** show your UQ student card (it does not matter if your UQ student card has expired), or official government photo id that shows your full name. Your id must be clearly visible for at least 3 seconds. If a marker cannot view your card clearly enough, they will ask you to move it so it is clearly readable.

If your government id does not show your name in Roman characters, as recorded in UQ's student enrolment system, you need to include a clear image of your government id on your first slide and a textual representation of your name that can be selected and copied from your slide so that it may be pasted into a translator. (e.g. If you use your China Resident Identity Card, you must provide clear images of the front and back of the card. You also need to provide a textual representation of your name in Chinese characters, e.g. 蒙晶.)

Your face must be visible throughout the presentation to show that you are the one speaking during the presentation. This may be through Zoom's participants window. If you cannot arrange for your face to be visible throughout the presentation, you **must** contact the course coordinator before 3 May 2022 to discuss your constraints.

4.2 On-Campus Indentity Verification

If you are presenting on-campus, at the start of the practical session in which you are presenting you **must** show the marker your valid UQ student card. Like in an exam situation, if you have lost your student card you must obtain a temporary identity verification document from the UQ student centre *before* the presentation.

5 Submission

There are three components that make up your assessable content for the presentation. These are the slides you use for your presentation, the presentation itself, and your evaluation of other presentations.

5.1 Slides

The slides for your presentation are to be submitted to a link provided on BlackBoard. Your slides are due at **13:00 (AEST) on 3 May 2022**. Late submission of your slides will result in a penalty of 2% of the maximum possible marks for the presentation, per minute that they are late. Regardless of any penalty applied to the presentation, *even* if the penalty is 100%, you **must** still make your presentation in your allocated timeslot.

5.2 Presentation

The presentations will take place in the practical sessions during weeks 10 to 13. You will be allocated a week in which you are to make your presentation. Your presentation is to use the slides you submitted on the third of May.

If you do not deliver your presentation, your final grade will be capped at a failing grade. If you are unable to attend your session to give your presentation due to exceptional circumstances, you may apply to defer your presentation to another date. You are not able to defer a deferred presentation.

5.3 Peer Assessment

You are expected to attend all presentations. You are required to submit an evaluation of each presentation you observe. Submission of *meaningful* feedback for at least **75%** of the presentations in your practical class is required to obtain a mark of 40% or higher for the presentation assessment.

An online form will be provided for you to submit your assessment for each presentation. You must submit your assessment of each presentation separately in order for the system to record all of your assessments.

If you are unable to attend a practical session due to exceptional circumstances, and miss viewing several presentations, you may apply for a modified limit on the number of presentations you must assess.

6 Academic Integrity

As this is a higher-level course, you are expected to be familiar with the importance of academic integrity in general, and the details of UQ's rules. If you need a reminder, review the Academic Integrity Modules[2]. Submissions will be checked to ensure that the work submitted is not plagiarised. If you have quoted or paraphrased any material from another source, it must be correctly cited and referenced[3]. Use the IEEE referencing style[4] for citations and your bibliography.

Uncited or unreferenced material will be treated as not being your own work. Extensive quotation or minor rephrasing of material from cited sources should be avoided. Significant amounts of cited material from other sources, even if paraphrased, will be considered to be of no academic merit. In all cases, any material that you cite must support the arguments and points that you are making in your presentation.

[2] https://web.library.uq.edu.au/library-services/it/learnuq-blackboard-help/academic-integrity-modules

[3] https://web.library.uq.edu.au/node/4221/2

[4] https://libraryguides.vu.edu.au/ieeereferencing/gettingstarted

7 Criteria

Criteria	Standard				
	Advanced (20)	**Proficient (16)**	**Developing (13)**	**Emerging (9)**	**No Evidence (0)**
Context 10%	Project is introduced clearly and well situated within its context, providing a good starting point to understand the system.	Project is introduced clearly with good contextual information, providing a fairly good starting point to understand the system.	Project is introduced fairly well with some contextual information, providing a comprehensible overview of the system.	Project scope and general context are fairly clear, providing a general overview of the system.	Project scope and context are not clear, providing a poor overview of the system.
ASRs 10%	ASRs are clearly described, well justified, clearly of high importance, and all will influence architecture decisions.	ASRs are clearly described, fairly well justified, seemingly of high importance, and all are likely to influence architecture decisions.	Most ASRs are well described but a few justifications are a little weak. Most are important and likely to influence architecture decisions.	Some ASRs are well described but some justifications are weak. Some are important and likely to influence architecture decisions.	Most ASRs are poorly described or poorly justified. Few are important or likely to influence architecture decisions.
Architecture Diagrams 15%	All diagrams are easy to comprehend, convey important information, and enhance the presentation.	Most diagrams are easy to comprehend, convey important information, and are used well in the presentation.	Most diagrams are comprehensible, convey useful information, and are used fairly well in the presentation.	Most diagrams are comprehensible, convey some useful information, and are connected to the presentation.	Some diagrams are incomprehensible, do not convey useful information, or are disconnected from the presentation.
Architecture 20%	Architecture description is clear, complete, concise, informative and at an appropriate level of detail, resulting in a good coherent understanding of the architecture design.	Architecture description is clear, seemingly complete, informative and at an appropriate level of detail, resulting in a fairly good coherent understanding of the architecture design.	Architecture description is mostly clear, informative and at an appropriate level of detail, resulting in a good overview of the architecture structure.	At times the architecture description is not clear, informative or at an appropriate level of detail, resulting in a vague overview of the architecture structure.	Architecture description is not clear, informative or at an appropriate level of detail, resulting in an incomplete or incorrect understanding of the architecture structure.
Critique 20%	Critique is clear, insightful, accurate, and concise, demonstrating an in-depth knowledge of the system design.	Critique is clear, fairly insightful and accurate, demonstrating a fairly in-depth knowledge of the system design.	Critique is mostly clear and accurate, demonstrating a good knowledge of the architecture structure.	At times critique is not clear or is inaccurate, demonstrating some deficiencies in understanding the architecture structure.	Critique is not clear or is inaccurate, demonstrating a poor understanding of the architecture structure.
Organisation 9%	Information is logically sequenced, with clear objectives and signposting to make it easy to follow.	Information is logically sequenced, with some clear objectives and signposting to make it fairly easy to follow.	Information is logically sequenced, with signposting to guide audience through presentation.	Information is logically sequenced but with little signposting.	Information is not logically sequenced, and planned progression was not clear to audience.
References 4%	References are used well, throughout presentation, to support points being made and are always cited correctly.	References are used well, in some places, to support points being made and are always cited correctly.	References adequately support important points being made and are almost always cited correctly.	References adequately support some points being made and are usually cited correctly.	Few references adequately support important points being made or are only sometimes cited correctly.
Presentation 4%	Presenter speaks fluently, clearly and audibly.	Presenter speaks clearly and audibly.	Presenter speaks clearly and audibly, except for one short exception.	Presenter mostly speaks clearly and audibly, except for a couple of short exceptions.	Presenter does not speak clearly or audibly at times.
Language 4%	Language is always pitched at a good technical level for audience.	Language is mostly pitched at a good technical level for audience.	Language is mostly appropriate for audience.	Language is occasionally too general or technical for audience.	Language is often too general or technical for audience.
Pacing 4%	Entire presentation is very well paced and appears well practised.	Presentation is well paced, with very little rushing and appears practised.	Presentation's pace is a little inconsistent with pauses or rushing at times.	Presentation becomes rushed as time is running out.	Presentation's pace is inconsistent making it difficult to follow at times.