# 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<sup>1</sup>.

**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.

<sup>&</sup>lt;sup>1</sup>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<sup>2</sup>. 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<sup>3</sup>. Use the IEEE referencing style<sup>4</sup> 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.

<sup>&</sup>lt;sup>2</sup>https://web.library.uq.edu.au/library-services/it/learnuq-blackboard-help/

academic-integrity-modules

<sup>3</sup>https://web.library.uq.edu.au/node/4221/2

<sup>4</sup>https://libraryguides.vu.edu.au/ieeereferencing/gettingstarted

Cuitauia	Standard				
Criteria	Advanced (20)	Proficient (16)	Developing (13)	Emerging (9)	No Evidence (0)
Context	Project is introduced clearly and	Project is introduced clearly with	Project is introduced fairly well	Project scope and general con-	Project scope and context are
10%	well situated within its context,	good contextual information,	with some contextual informa-	text are fairly clear, providing a	not clear, providing a poor
	providing a good starting point to understand the system.	providing a fairly good starting point to understand the system.	tion, providing a comprehensible overview of the system.	general overview of the system.	overview of the system.
ASRs	ASRs are clearly described, well	ASRs are clearly described, fairly	Most ASRs are well described	Some ASRs are well described	Most ASRs are poorly described
10%	justified, clearly of high impor-	well justified, seemingly of high	but a few justifications are a lit-	but some justifications are weak.	or poorly justified. Few are im-
1070	tance, and all will influence archi-	importance, and all are likely to	tle weak. Most are important	Some are important and likely to	portant or likely to influence ar-
	tecture decisions.	influence architecture decisions.	and likely to influence architec-	influence architecture decisions.	chitecture decisions.
	tectare decisions.	initacrice dicritecture decisions.	ture decisions.	interice dicinecetare decisions.	critecture decisions.
Architecture	All diagrams are easy to com-	Most diagrams are easy to com-	Most diagrams are comprehen-	Most diagrams are comprehen-	Some diagrams are incompre-
Diagrams	prehend, convey important in-	prehend, convey important in-	sible, convey useful information,	sible, convey some useful infor-	hensible, do not convey useful
15%	formation, and enhance the pre-	formation, and are used well in	and are used fairly well in the	mation, and are connected to the	information, or are disconnected
	sentation.	the presentation.	presentation.	presentation.	from the presentation.
Architecture	Architecture description is clear,	Architecture description is clear,	Architecture description is	At times the architecture de-	Architecture description is not
20%	complete, concise, informative	seemingly complete, informa-	mostly clear, informative and at	scription is not clear, informative	clear, informative or at an appro-
	and at an appropriate level of de-	tive and at an appropriate level	an appropriate level of detail,	or at an appropriate level of de-	priate level of detail, resulting in
	tail, resulting in a good coher-	of detail, resulting in a fairly good	resulting in a good overview of	tail, resulting in a vague overview	an incomplete or incorrect un-
	ent understanding of the archi-	coherent understanding of the	the architecture structure.	of the architecture structure.	derstanding of the architecture
	tecture design.	architecture design.			structure.
Critique	Critique is clear, insightful, accu-	Critique is clear, fairly insightful	Critique is mostly clear and ac-	At times critique is not clear or is	Critique is not clear or is inaccu-
20%	rate, and concise, demonstrat- ing an in-depth knowledge of the	and accurate, demonstrating a fairly in-depth knowledge of the	curate, demonstrating a good knowledge of the architecture	inaccurate, demonstrating some deficiencies in understanding the	rate, demonstrating a poor understanding of the architecture
	system design.	system design.	structure.	architecture structure.	structure.
Organisation	Information is logically se-	Information is logically se-	Information is logically se-	Information is logically se-	Information is not logically se-
9%	quenced, with clear objectives	quenced, with some clear	quenced, with signposting	quenced but with little signpost-	quenced, and planned progres-
	and signposting to make it easy	objectives and signposting to	to guide audience through	ing.	sion was not clear to audience.
	to follow.	make it fairly easy to follow.	presentation.	9.	5.6.1. 1145 1.61 6.641 1.6 444.6.1.66
References	References are used well,	References are used well, in	References adequately support	References adequately support	Few references adequately
4%	throughout presentation, to	some places, to support points	important points being made	some points being made and are	support important points being
	support points being made and	being made and are always cited	and are almost always cited cor-	usually cited correctly.	made or are only sometimes
	are always cited correctly.	correctly.	rectly.		cited correctly.
Presentation	Presenter speaks fluently, clearly	Presenter speaks clearly and au-	Presenter speaks clearly and au-	Presenter mostly speaks clearly	Presenter does not speak clearly
4%	and audibly.	dibly.	dibly, except for one short ex-	and audibly, except for a couple	or audibly at times.
			ception.	of short exceptions.	
Language	Language is always pitched at	Language is mostly pitched at	Language is mostly appropriate	Language is occasionally too	Language is often too general or
4%	a good technical level for audi-	a good technical level for audi-	for audience.	general or technical for audi-	technical for audience.
	ence.	ence.		ence.	
Pacing	Entire presentation is very well	Presentation is well paced, with	Presentation's pace is a little in-	Presentation becomes rushed as	Presentation's pace is inconsis-
4%	paced and appears well prac-	very little rushing and appears	consistent with pauses or rushing	time is running out.	tent making it difficult to follow
	tised.	practised.	at times.		at times.