Course Overview

Software Architecture

Richard Thomas

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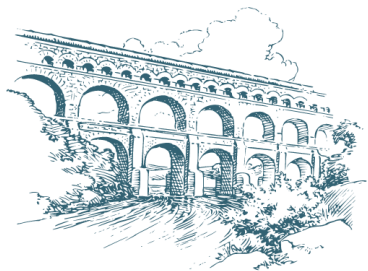
University of Queensland



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- How to build software that is *reliable* and *fault tolerant*.
- How to build software that is *scalable*.

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Lectures

- Learn common *architecture patterns*.

Tutorials

Practicals

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- Developing stateless and persistent *RESTful web APIs*.
- Packaging software components into *Docker* containers.

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- Packaging software components into *Docker* containers.
- Deploying containers to cloud platforms using *Terraform*.

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- Using cloud platform tools to *monitor* and *scale* applications.

§ Assessment

Assessment

Project Proposal	5%
Presenting an Architecture	30%
Building a Scalable Architecture	30%
Capstone Project	35%

Presenting an Architecture

1. Find an active *open-source* project that *interests you*.
2. *Discuss* the project with course staff.
3. Dive into the code and *understand* the architecture.
4. *Present* a summary of the architecture to the class.

Building a Scalable Architecture

1. Build a *RESTful web API* according to our API specification.
2. *Test* that the API satisfies the specification.
3. *Deploy* the API to a cloud platform.
4. *Scale* the API to handle *high loads*.

Capstone Project

1. Write a *proposal* for a *software system* that you would like to build.
2. Vote on other proposals that you would like to work on.
3. Teams of 4 students will be assigned to work on a project.
4. *Design* and *implement* the project.

§ You and Us

Who are we?

Richard Thomas

Brae Webb

Evan Hughes

Matt Holloway

Question

Who are *you*?

Course Website

All course material is hosted on the course website:
`https://csse6400.uqcloud.net`

If you find any *errors* or have any *improvements*, please submit a pull request on GitHub:
`https://github.com/CSSE6400/software-architecture`