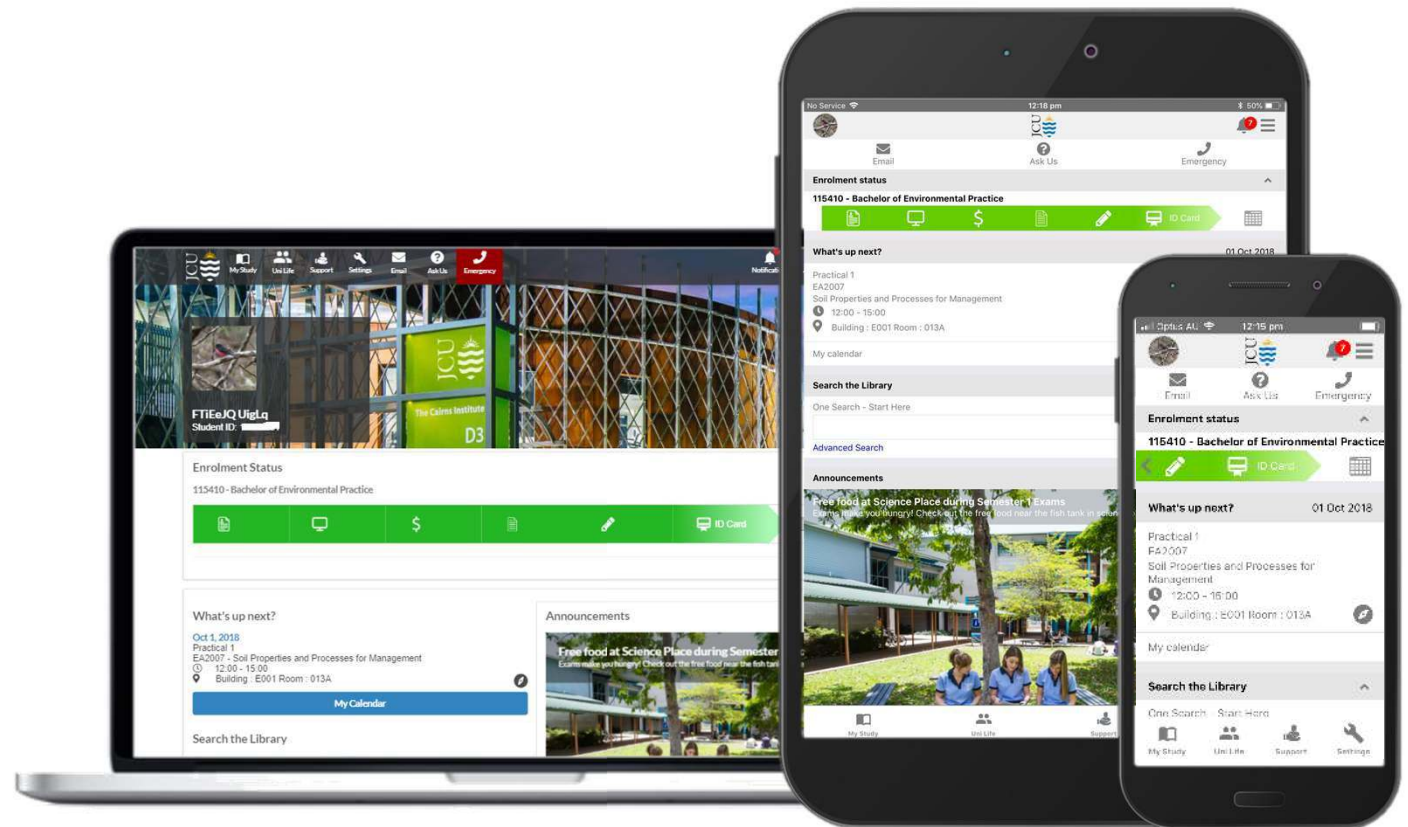


# JCU App

Creating a mobile JCU student experience

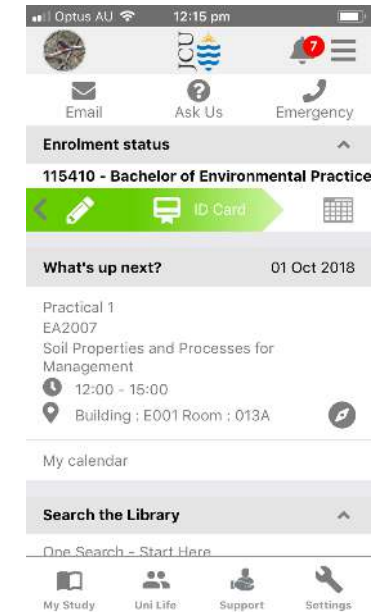
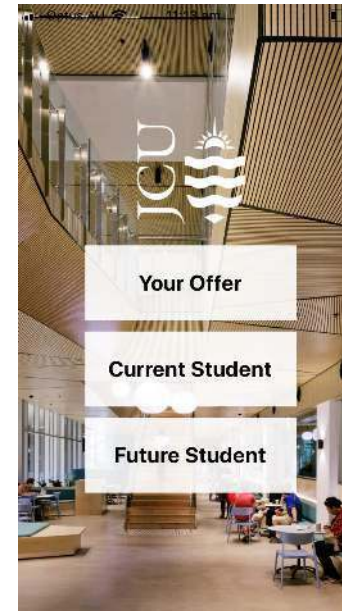


# JCU App

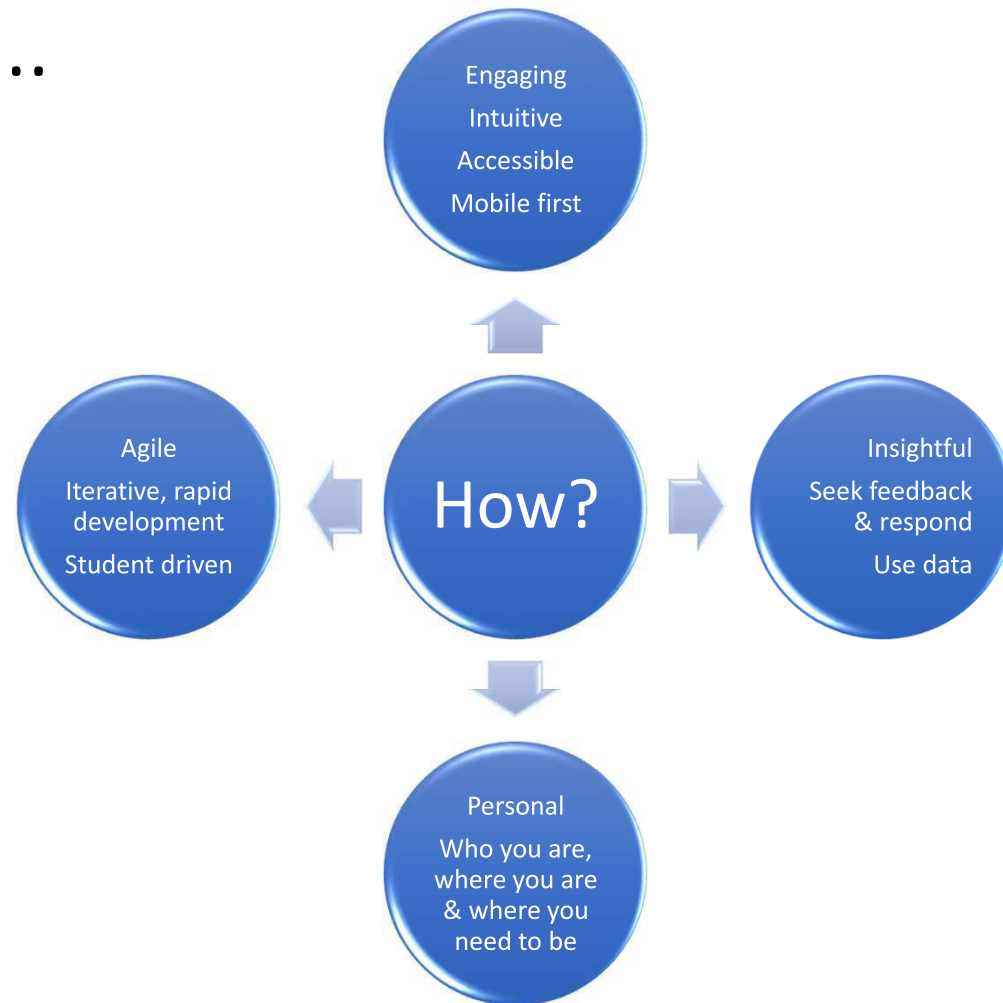
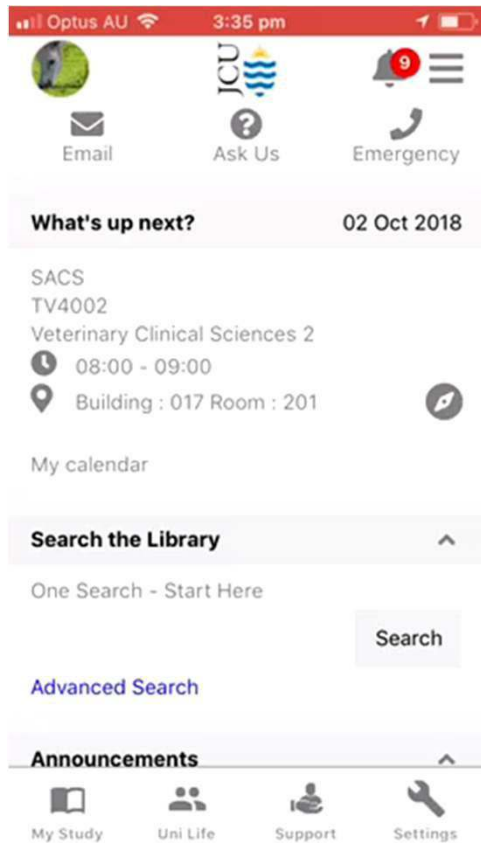
The JCU app gives students access to everything they need for study, support and university life, anywhere, anytime

Available in IOS, Android and web version

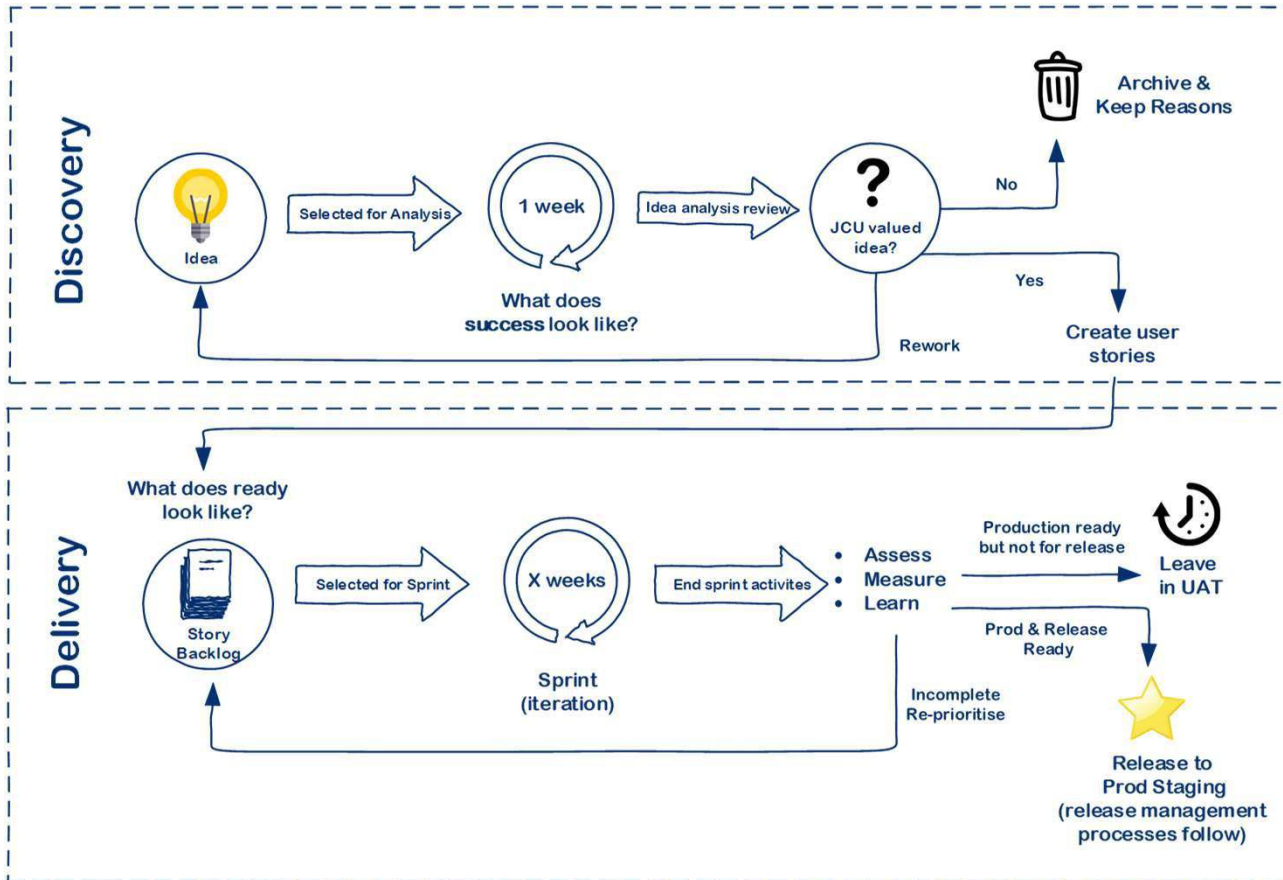
Including a guided workflow through offer acceptance to enrolment and class registration



# One JCU experience...



# Ideas to Implementation



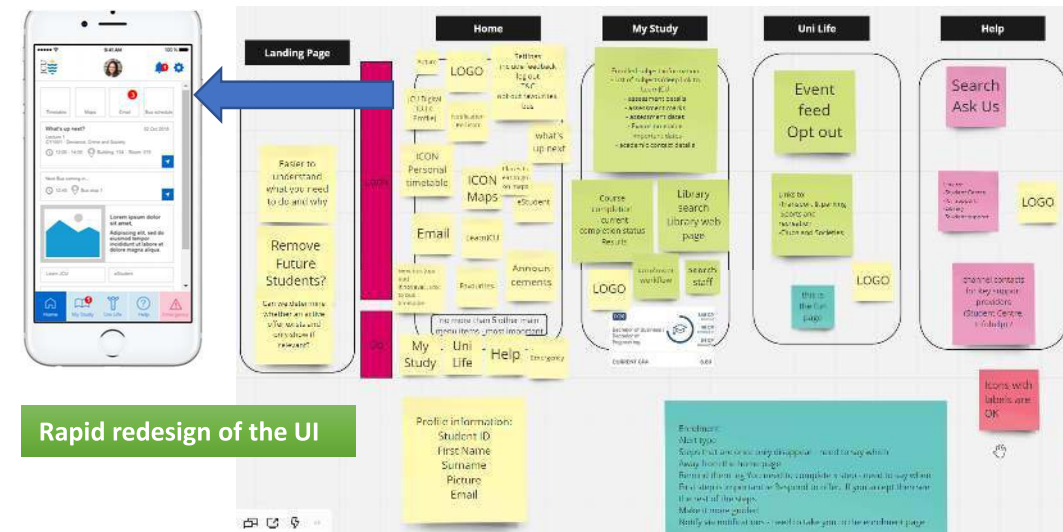
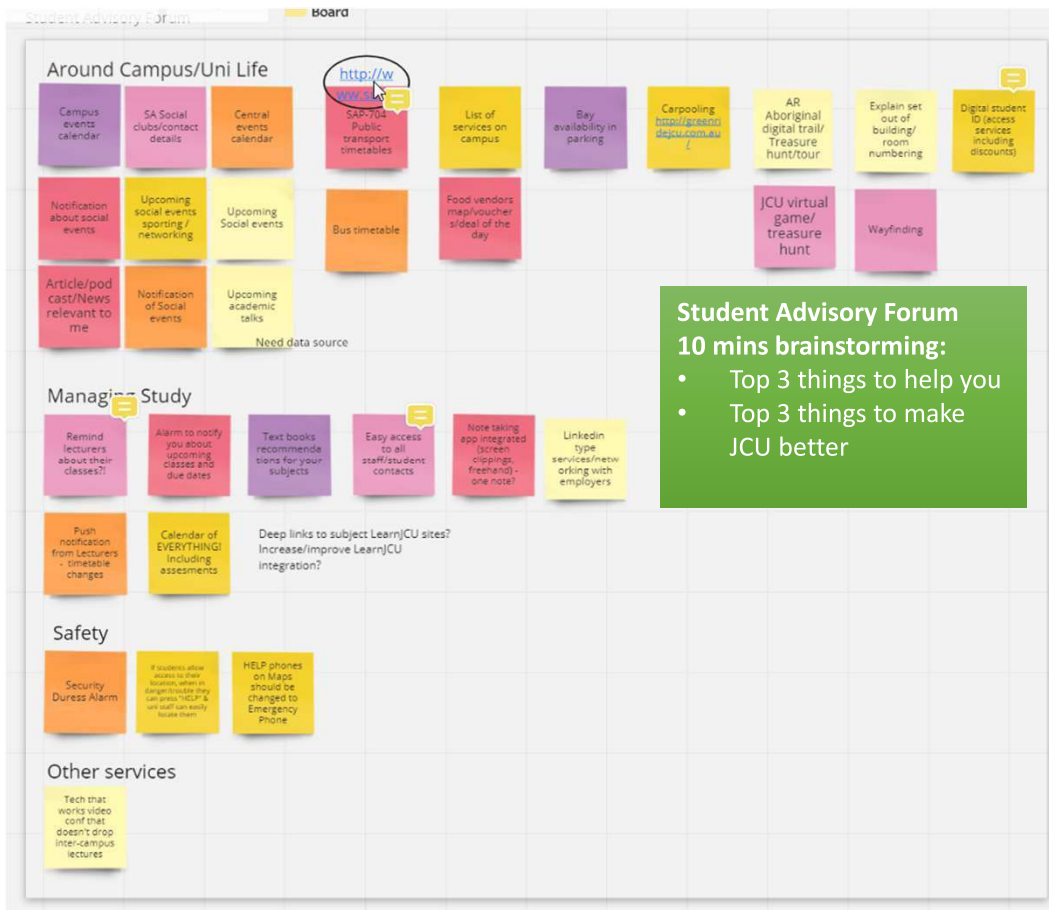
- JIRA: sprints & backlog
- Zephyr: test management
- Confluence: as-built documentation

User involvement in UAT & Alpha student group

Automation of functional testing is a future goal



# No end to the ideas..



## JCU Student Portal Preferences

How important is the ability for you to be able to access the following information and services in the

Ranking	Answer Options	Very Important
✓1	Access lecture and tutorial material online	93
✓2	View class timetables and locations	88
✓3	Quick access to systems e.g. LearnJCU, eStudent	87
In progress 4	View exam timetables and locations	85
5	View exam and assessment results	83
✓6	Access to JCU email	83
✓7	Enrol online	81
✓8	Accept course/module offers	67
✓9	Access to Library services	62
✓10	Receive alerts and reminders such as assessment due dates, billing and payments	55
11	Pay for services and consumables online e.g. Recharge printing account, pay	53
12	Ability to change password	48
In progress 13	View an academic calendar for the University	54
14	View degree and course progress information	49
15	Ability to lodge requests for support and services through a single point and track	50
16	View your study plan for course completion	48

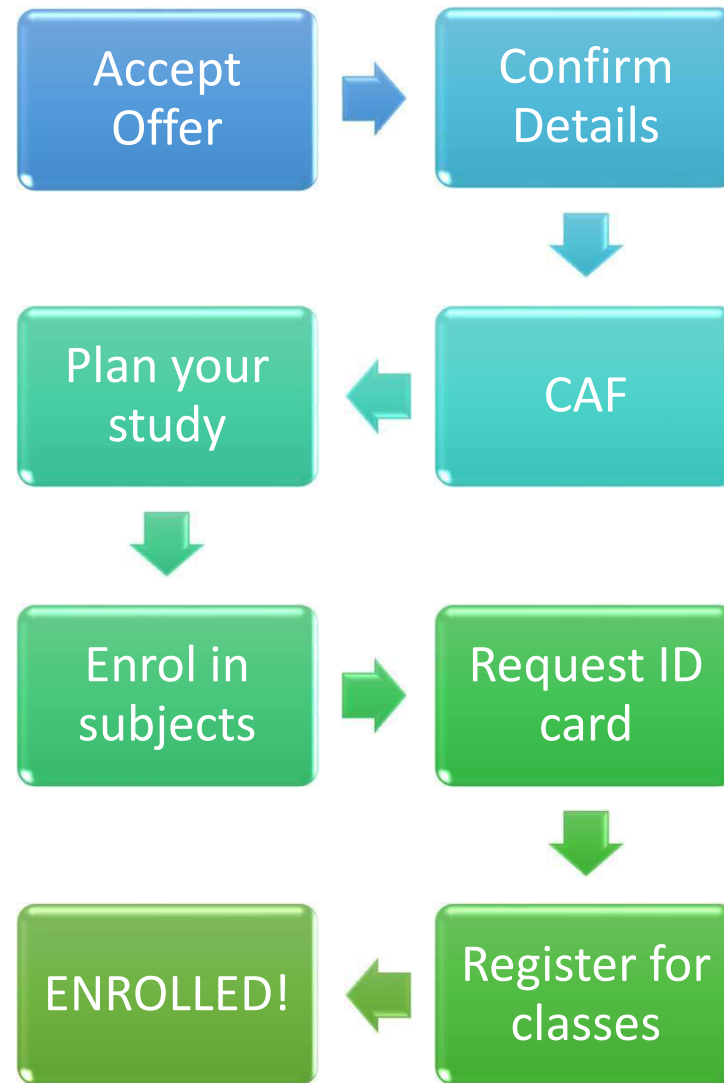
# Enrolment Workflow

## Business rules for each step:

- Is it visible? With variations
- Can you access it? With variations
- When is it completed? With variations
- Can you return to it?

## Content for each step:

- Icon, short heading, long heading
- Step instructions
- Need Help button – link to CRM help
- Next Button – what action does it complete?
- Action Button – deep link to eStudent or web page



# Enrolment Workflow Technical Challenges

Enrolment Status

300104 - Master of Data Science



- Student on-boarding is hard for the student
  - Need a guided workflow to make it easier for the student to follow
- Student App guides students through the process
  - Deep linking to the right screen in Student Management System
  - Student returns to the app after each step
  - Need to determine current step in workflow on return
  - Traditional data pushes not fast enough

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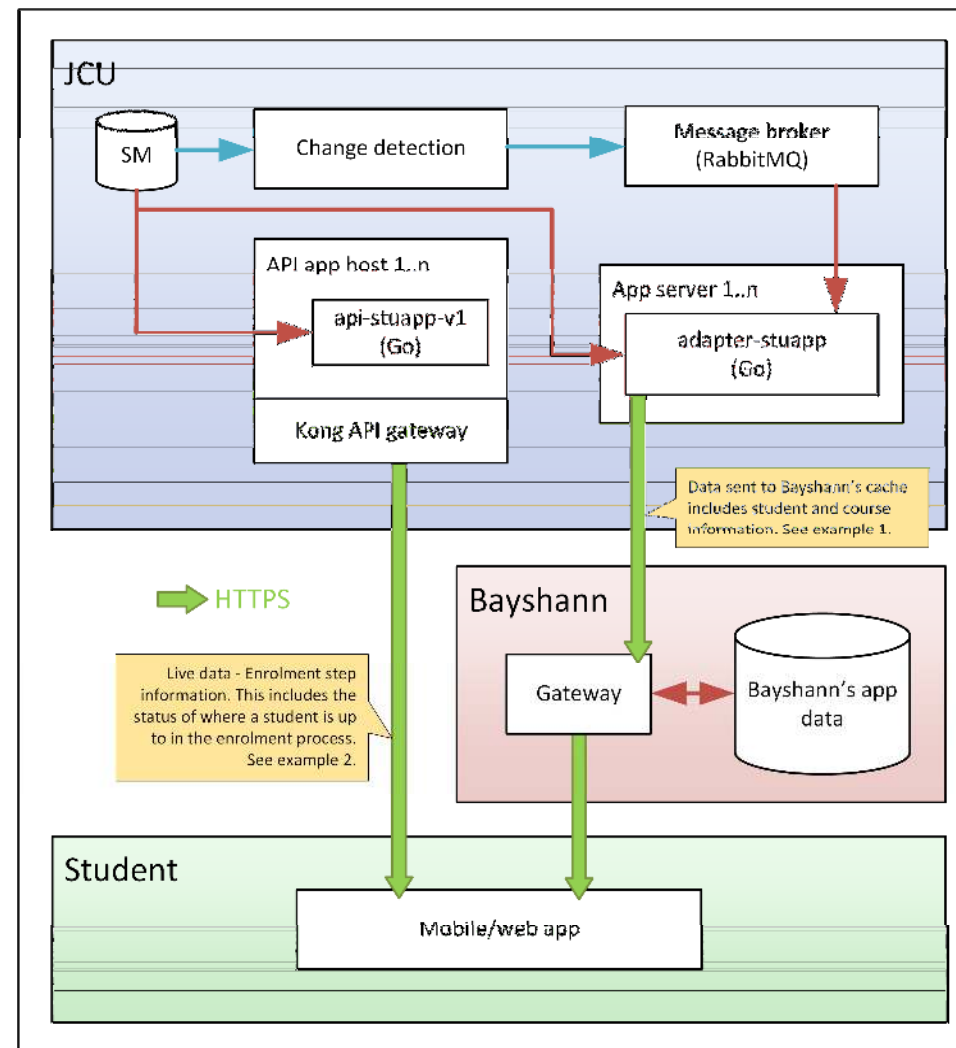
# Student App Integration Requirements

- Slow changing data
  - Basic student details
  - Course information
  - Timetable
- Real-time user interaction with Student Management System
  - SSO to embed eStudent screens
- Fast changing data
  - Enrolment Workflow



# Integration Architecture

- Traditional data push for slow changing data
- SSO to Student Management System (eStudent)
- Real time API to support Enrolment Workflow
  - Secured with OAuth2



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# Real-time API Integration

- Always up-to-date data
  - Even a few seconds of delay may result in the student being shown the wrong step to complete next
- Performance is important
  - Integration is “just in time”
  - Slow loading pages is poor user experience
- Failures of underlying system need to be carefully managed
- OAuth2 to authorize access to individual student data

# API Architecture

## Student App

Web and Mobile apps

## API Gateway

Off-the-shelf API Gateway, verifies OAuth2 tokens and proxies valid requests to the API implementation

## Student App REST API

JCU built REST API written in Go, handles data transformation

## Student Management Database

System of record for student data

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# Questions?