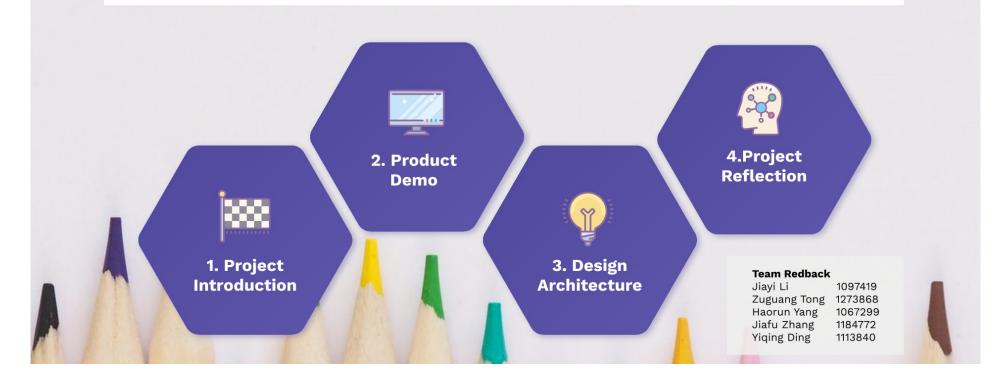


# **Curriculum Mapping System**



## 1. Project Introduction

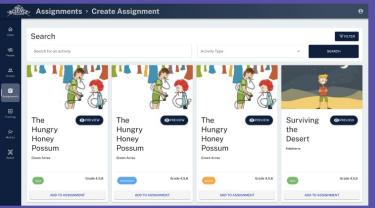
- · Science Island
  - STEM based online game
- · Science Island Teacher Portal
  - Comprehensive online platform
  - User management
  - Assignment management
  - Curriculum mapping (Australian Curriculum)
  - Learning metrics and reports



Developing the curriculum mapping system and Assignment extension in Teacher Portal



120+ Quests



120+ Activities

## 2. Product Demo



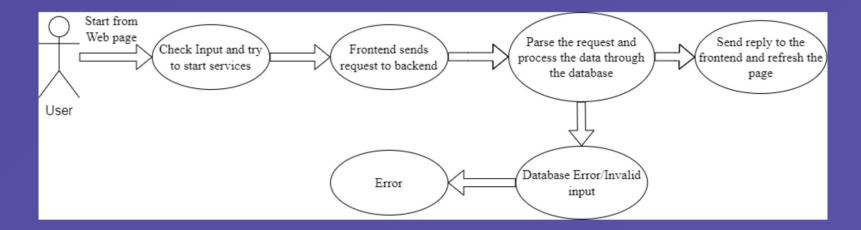




Let's go to our new system!

## 3. Design Architecture

#### **User Interaction**



## 3. Design Architecture

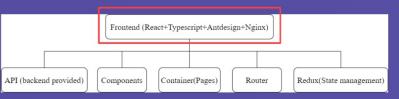








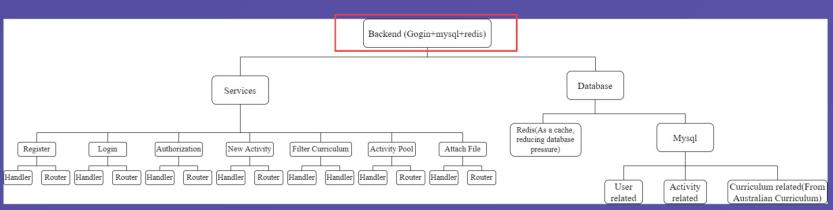
#### **Application Architecture**





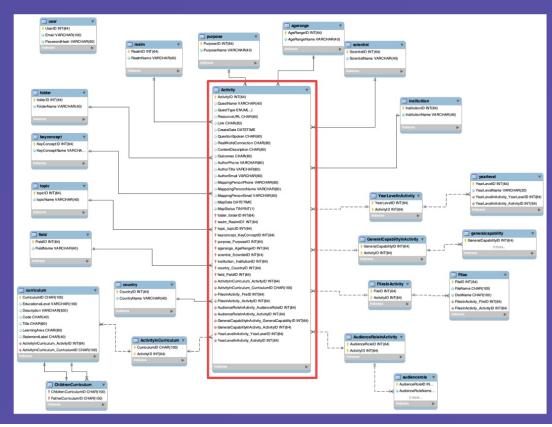






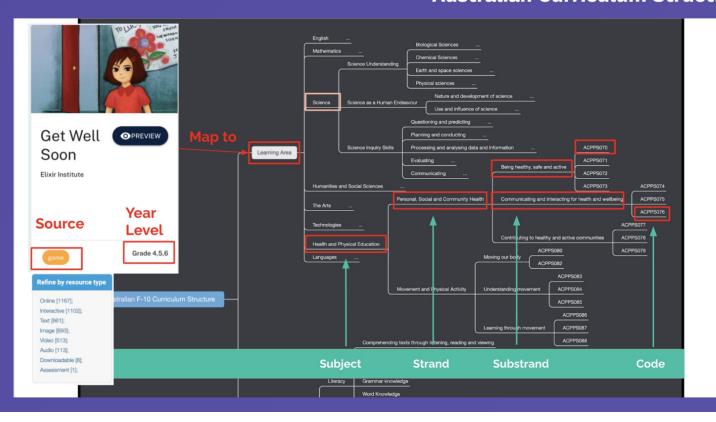
## 3. Design Architecture

**Database Schema** 

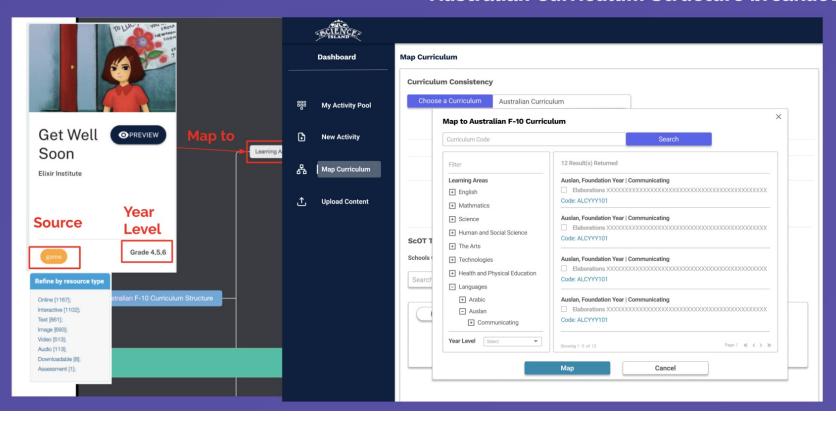




# Project Highlight (Tech & Non-Tech) Australian Curriculum Structure breakdown



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#### **User Story Example:**

As a Teacher/Admin, I can map the activity based on the curriculum structure, so that I can map the activity in a hierarchical way and find the curriculum code

#### Tasks:

- 1. Crawling data from the machine-readable content of Australian Curriculum
- 2. Parse and breakdown the data to make the hierarchy for searching and filtering
- 3. 5+ APIs to be done and tested
- 4. Large data input from external resource

#### Data Parallel:

A timer was set at the back-end to monitor the update from Australian Curriculum - run at 1am every month



#### **Challenges**

- Develop from scratch
- · New technical stack to learn
- Huge user stories (Many tasks and subtasks, large coding amount)
- Back-end architecture is complex (involving many interaction with the database and front-end)
- Front-end requires lots of components, styling and testing for data response
- 28+ APIs needs to be developped and tested
- Deployment

#### **Improvements**

- Upgrade system UI styling
- More user authentication and credential
- The space for SCoT Term & Other International Curriculum has been reserved for future development
- Optimize General Capability

#### Handover (By 13th June)

- Prodcut: The Curriculum Mapping System
- · Github: source code
- All Documentation: download from Confluence and import to Github
- · Handover Guide:
  - How to run the product
  - Complete and incomplete functions
  - Deployment guide with Docker
- Final Presentation Slides
- Two weeks buffer for quality assurance after handover



# **Curriculum Mapping System**

