T3A2 School Yearbook App

Wenxuan Pan, Dieter Schmid, Alicia Han

Website Description

A Digital School Yearbook

Makes a permanent record of all students in attendance for a year level that has graduated a school.

- Displays Image of the Student
- Contact Information on the student
- Final Thoughts

Features/Functionality

- The admin can add students to the app
- The students can update their details
- The admin can upload photos and display them for students
- The students can fill out a questionnaire regarding their final thoughts
- The student can provide contact details
- Admin can invite students to the app via an email code.
- The app will allow admin and student logins.

Target Audience

The Application is targeted at all school stakeholders this includes:

- students of the graduating year level
- other students at the school.
- allumi members
- Parents of the students
- Teachers and other staff

Tech Stack

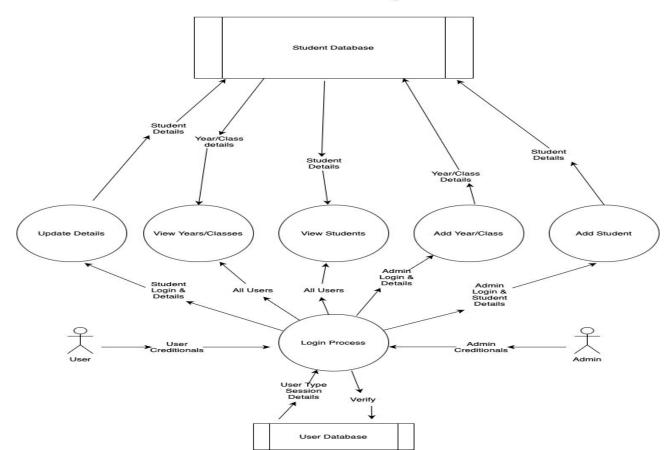
This application uses the MERN technology stack.

- MongoDB
- Express.js server
- Node.js
- React front end.

The front and back end server will be deployed onto a cloud service.

Dataflow Diagram

Dataflow Diagram



User Stories

User Stories

Split into three categories:

- 1. All users (students and admin)
- 2. Admin only
- 3. Students only

Throughout the planning process, we found that we needed to add and modify ideas in order for the application to work better. Hence, user stories from the beginning of the planning phase were updated to reflect these changes.

Initial User Stories

All users:

- 1. As a user, I would like to be able to add a student profile into different classes/cohorts and year levels, so that student data is organised into the correct categories.
- 2. As a user, I would like to be able to login and view a list of students in each class and year level/cohort at my school.
- 3. As a user, I would like to be able to click into individual students and see their relevant information, so that I can stay in touch with classmates and connect with acquaintances.
- 4. As a user, I would like to have a navigation bar so that I can easily access different parts of the website.

Initial User Stories

Admin only:

1. As an admin, I want to be able to remove any profile from the database to ensure data integrity.

Students only:

- 1. As a student, I would like to be able to update my information, so that others can get in touch with me via my current contact details if needed, however I would like to ensure that only admin and myself can manipulate my account, for better security.
- 2. As a student, I want to be able to delete any information on my account, or my entire profile, from the database so that I have control over my information.

Revised User Stories with Updated Features

All users:

- 1. As a user, I would like to be able to login and view a list of classes in my school, and the students in each class.
- 2. As a user, I would like to be able to click into individual students and see their relevant information, so that I can stay in touch with my classmates and connect with acquaintances.
- 3. As a user, I would like to have a navigation bar so that I can easily navigate around the application.
- 4. As a user, I would like to be able to reset my login password for better security.

Revised User Stories with Updated Features

Admin only:

- 1. As an admin, I would like to see a list of all yearbooks and classes at my school, and be able to modify or delete them as appropriate, in case of error or duplication.
- 2. As an admin, I would like to be able to input a class of students along with their email and photos, and modify and delete student data as needed in case of error or duplication.
- 3. As an admin, I would like to be able to send out an invitation code to students so they can utilise the code to sign up and create their own accounts, this will ensure that only students who are actually in the class will be able to register to that class.

Revised User Stories with Updated Features

Students only:

- 1. As a student, I would like to receive a secure invitation code and link from my school admin to be able to register an account.
- 2. As a student, I would like to be able to add, modify and delete any of my data from my account, and ensure that only the admin or myself can manipulate my account, for better security.

Application Architecture Diagram

Front-end / Client-side

Back-end / Server-side

Database



User Admin/student interacts with browser on device

React

- JavaScript framework
- Makes HTTP request to Express.js
- Receives HTTP response from Express.js
- React Router defines routes
- Renders components on a responsive web page for user, based on HTTP response



Node.js

· Back-end JavaScript runtime environment

Express.js

- Receives HTTP requests from React and sends HTTP responses back
- Defines API endpoints
- · Controller functions
- · Authentication and authorisation
- Sends instructions to Mongoose



Mongoose

- Defines schema and models
- Makes queries to the database with CRUD operations
- Sends results back to Express.js



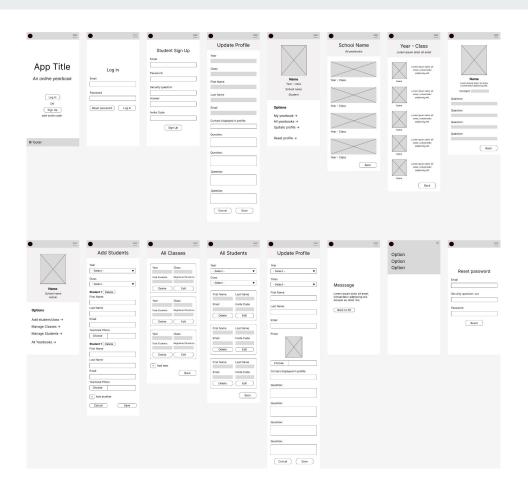
MongoDB

- · Hosted on Atlas
- Stores data in collections and documents
- Receives CRUD queries from Mongoose
- Results are interpreted by Mongoose

Wireframes

Mobile

View in Figma



Tablet

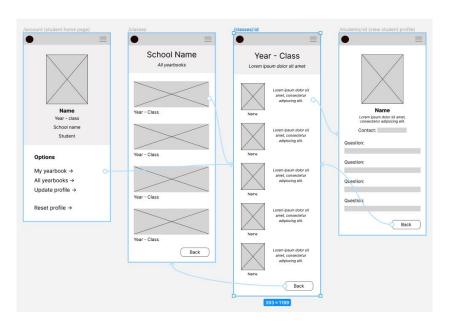


Desktop



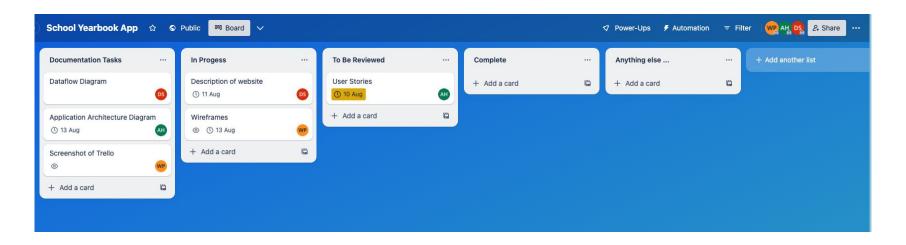
Relationships between screens

- Student flow Figma
- Admin flow Figma

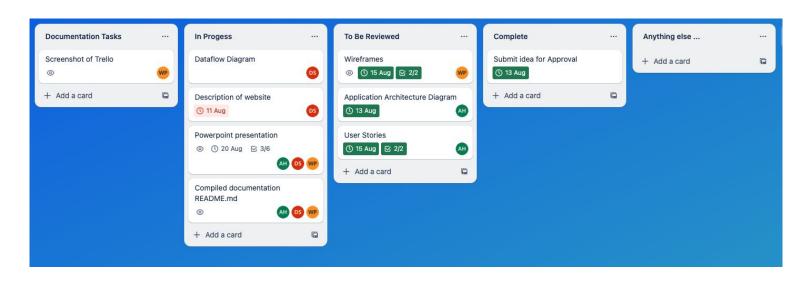


Trello board

9 August: project start



19 August: near-complete



Subtasks

