# Jewels Academy Time Management Application
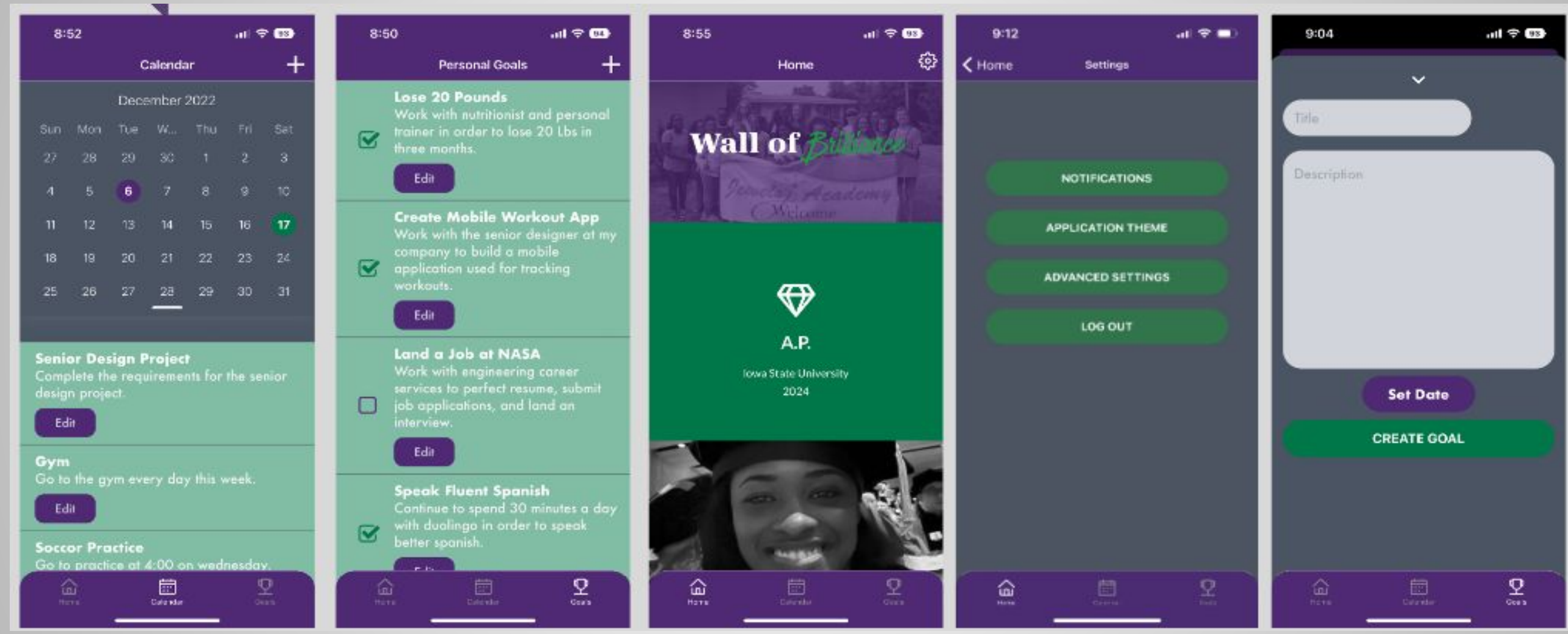
## Team Members:
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**SDDEC22-06**     **Client: Murugan Nambiar**     **Faculty Advisor: Rachel Shannon**



## Problem Statement
- Students attending the Jewels Academy organization need a tool that can be used to manage their busy lives.

## Functional Requirements
- User should be able to:
  - Access the interconnected Dashboard, Tasks List, Goals, and Settings pages
  - Add/Set/Remove tasks and goals
  - View Calendar
  - Calendar and Tasks List timescale
  - Add/Set/Complete/Remove Goals
- Login/Logout/Register
- Adjust account & notification settings

## Non-Functional Requirements
- Account creation updates/changes
- Support the insertion of take and organization
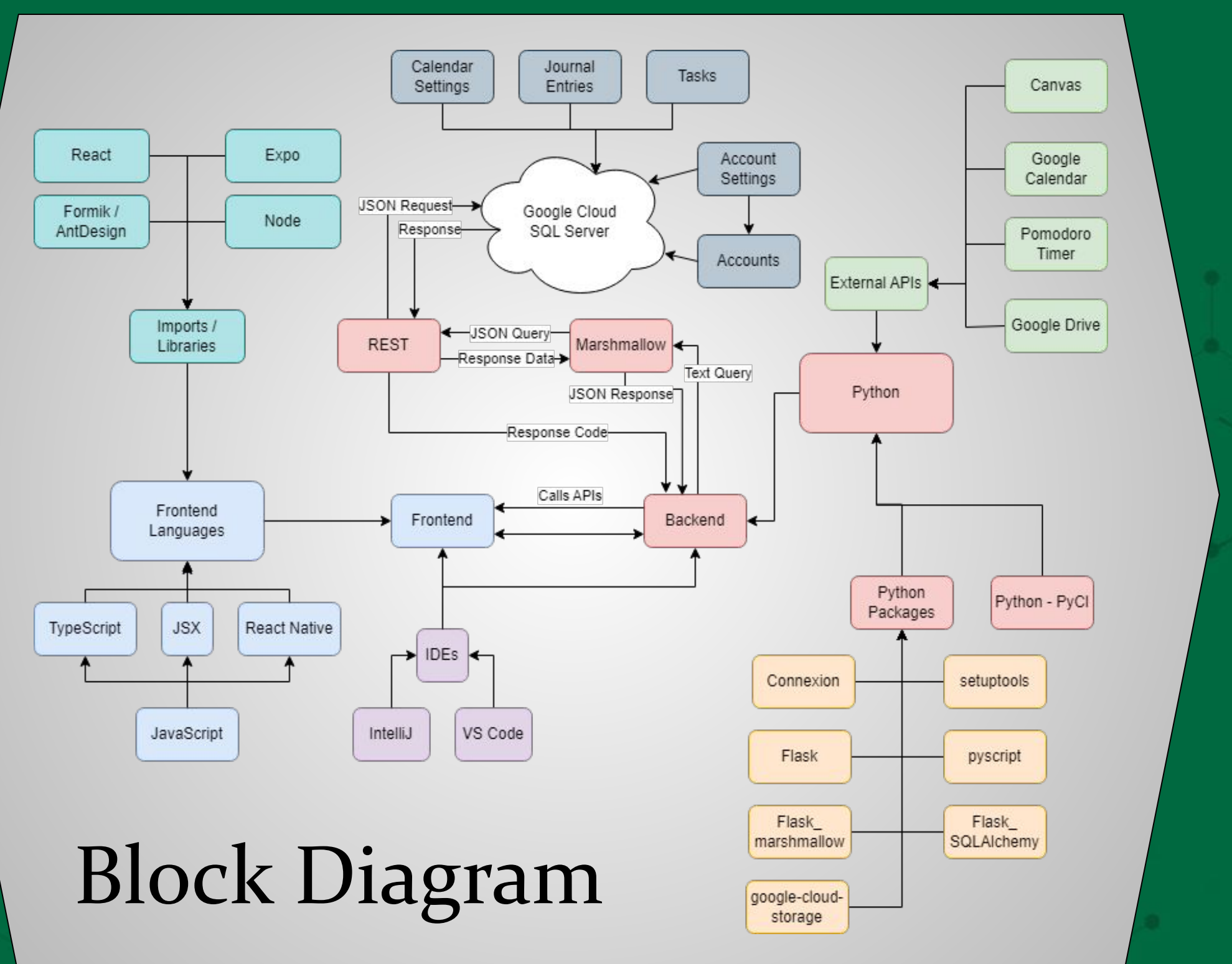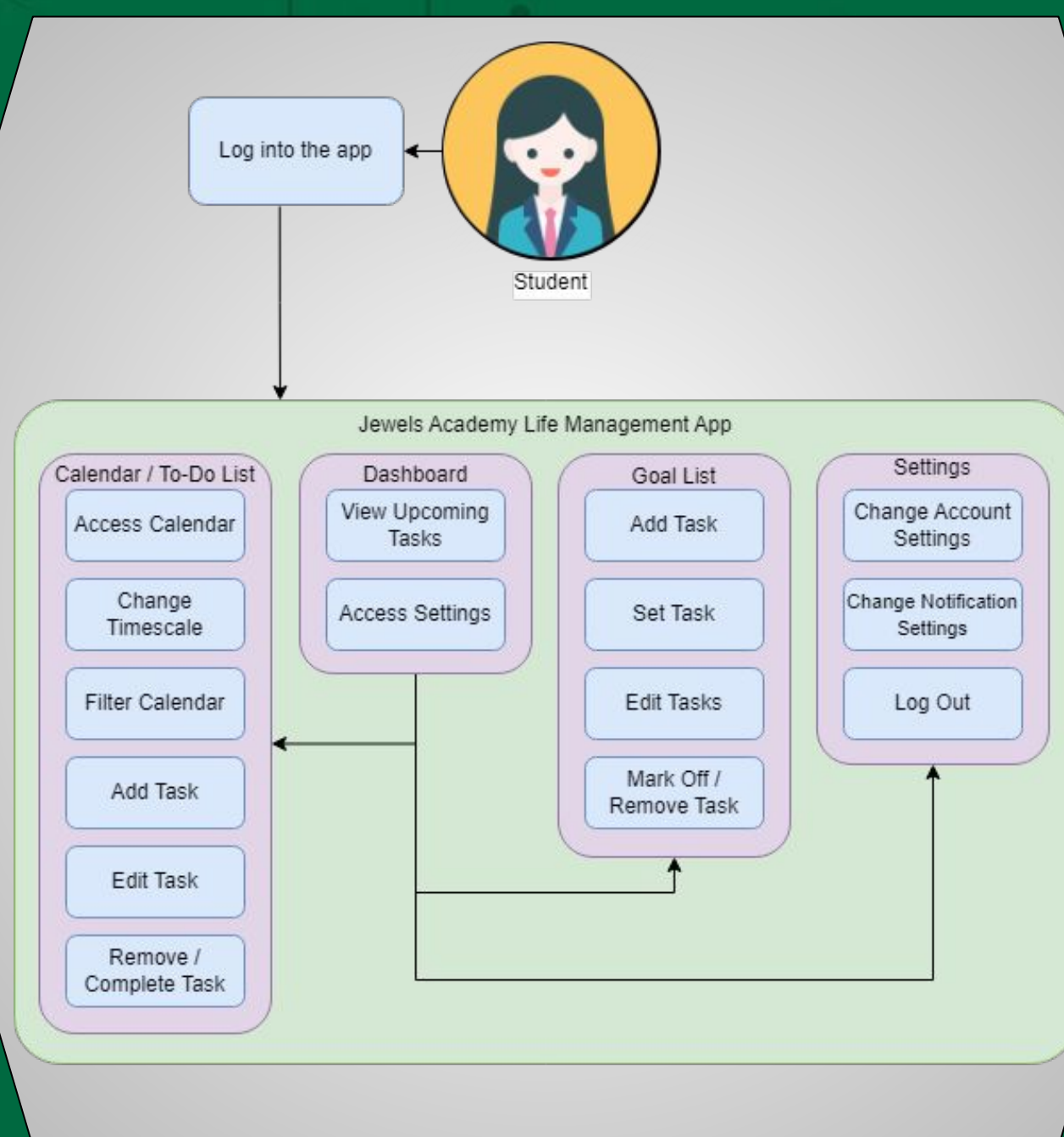- Visually appealing in the Jewels Academy color scheme

## Intended Users & Uses
- Students of Jewels Academy

## Operating Environment
- An App running on React
- Google Cloud backend using CloudSQL and Google App Engine

## Testing
- Backend: Utilized Postman
- Frontend: Utilized Expo



## Block Diagram



## Technical Details
Details about our functional module
Frontend:
- React Native for the framework
- Javascript, Typescript, and JSX for languages
- Formik library for forms for the To-do, Login, Register, and Goals pages
- Expo library for real time testing

Backend:
- Python as base language
- Marshmallow for JSON serialization and deserialization
- Flask for request routing and HTTP endpoints
- Flask-SQLAlchemy for database management

## Engineering Standards
- IEEE 29119-3-2021 Standards of Software Testing
- IEEE 12207-1996 Standards for Developing and Managing Software
- IEEE 7002-2022 Standards of Privacy Oriented Considerations in Software Development

## Security Concerns
- User email and password storage:
- Mitigated by utilizing Google Cloud's included encryption at rest and encryption in transit.
- User data available to the frontend:
- Mitigated by using a REST system with user related responses exclusively acting based on a unique identifier, and HTTP response codes.