

Underage Regulation App Documentation

Contents:

- Feature overview
- Architecture design
- UI design
- Database design
- Security considerations
- Technology
- Scalability considerations

Problem statement

The kingdom of Eswatini is facing a realworld challenge caused by the lack of regulations on bottle/liquor stores, causing the youth to have access to age restricted substances.

Theoretical solution

A system that will require a customer to present legal documentation at the check out booth and verify the legitimacy of the presented document prior to purchase of any alcoholic/controlled substance

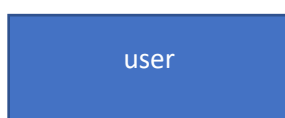
Overall aim

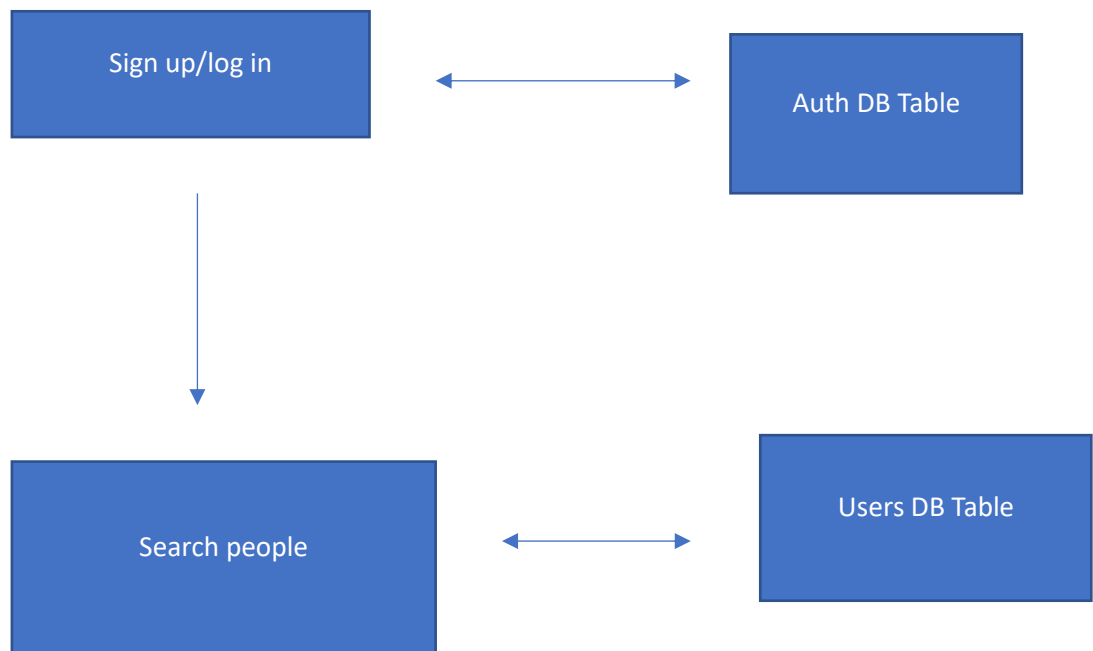
To pioneer system aimed to protect minors from alcohol abuse prompting a new legislation by government requiring all liquor vendors nationwide to implement the system as the primary solution to the under age drinking crisis.

Feature overview

User functions

- Sign up(email, password, name, surname, DOB)
- Sign in(email, password)
- Search user by:
 - First name
 - Last name
 - Age range
 - Date of birth





Architecture design

Front end: web interface for user interaction

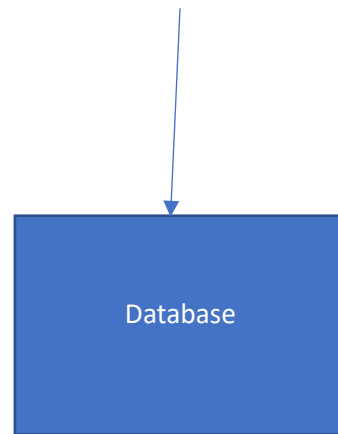
Backend: rest API

Logic

Database: relational

Dataflow:





UI design

Sign up screen

- Input fields: first, last, DOB, Email, password.
- Button: sign up

Sign In screen

- Input fields: email, Password.
- Button: sign in

Home/Search screen

Input fields: (any or all)

- Name
- Surname
- Age
- Date of birth
- Search button
- Results view

Database design

Security considerations

- Use HTTPS for secure communication.
- Store passwords hashed and salted
- Validate inputs to prevent SQL injection.
- Use OAuth for authentication

Technology

Frontend:

- react/angular

Backend:

- Node.js + Express/python (Django or Flask)? Java Spring boot

Database:

- PostgreSQL or MySQL

Auth:

- firebase Authentication

Scalability Considerations

- Index First_name, Last_name and DOB columns for faster search.