Assurance Recipes

Motivation / Problem :

- The original website was coded by Mark Hernandez
- Uses an unsafe database that isn't owned by our client.
- Hosted on website that needs to be moved.
- We want to recreate and redo the webapp so that it can be released to the community.

- Solution : Recreate application using updated libraries and local data base so it's secure as possible

Team Members :

- Garrett Harkness
- Matthew Smith
- Shiwei Wang
- Kevan Patel
- Qiwei Li

Advisor/Client :

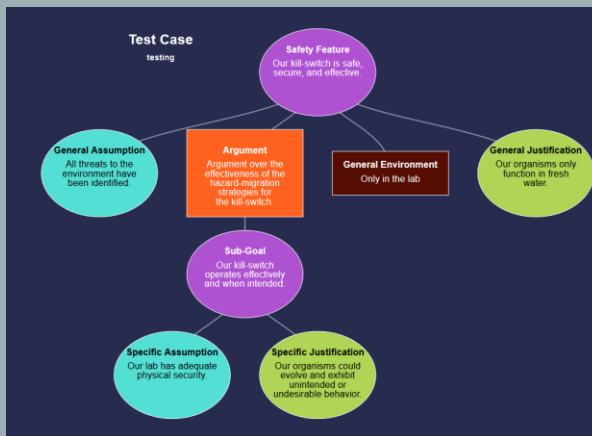-Myra Cohen

Functional Requirements :

- Creation and editing of safety case diagrams.
- Creating safety cases based on a template.
- Free text editing on the diagrams.
- Importing and exporting of safety cases on local machine.
- Opening an existing safety case.

Non-functional Requirements :

- Performance, Scalability, Security, Availability, Reliability, Usability

Operating System :

- Electron App executable via Windows, iOS, and Linux

Testing Environment :

- Selenium
- React Testing Library

Test Strategy :

- Interface Specifications
- Functional Testing
    • Testing models
    • Testing UI
- Non-Functional Testing
    • Performance, Security, Usability, Compatability

Technical Details :

- Programming Language : React.js, html, css, typescript
- Framework : Electron
- Libraries : Code Gen, Konva JS, Selenium, React Testing Library, JSON Schema Generator
- Development Environment : Visual Studio Code, docker, github