User Story Map

Activities (Backbone)

- Access website
- Select and view a data visualisation
- Customise the data set to be visualised
- Visualise comparative data
- Log fault for resource wastage
- Role based log in system

User Stories

- As a user, i can access the website
- As a user, I can visualise pre-selected data
- As a user, I can select different visualisations for pre-selected data
- As a user, I can select a residence and view the corresponding visualisation
- As a user, I can select different resources to be visualised
- As a user, I can see total consumption or average consumption per student
- As a user, I can select the resolution of the data I wish to view
- As a user, I can compare different date ranges for the same building
- As a user, I can compare different buildings for the same date range
- As a user, I can log a generic resource wastage fault
- As a user, I can log a resource specific fault for wastage
- As a user, I can log a location specific fault for resource wastage
- As a user, I can create an account
- As a user, I can log into my profile to log a fault
- As a user, I can view my profile
- As a user, I can change my password
- As an administrator, I can manage all registered users
- As an administrator, I can create accounts for different types of users
- As an administrator, I can change access rights for different users
- As a maintenance staff member, I can view all logged faults
- As a user, I can log in using my google account

Sprint 1

- **Setup and initialise server** — Size: Medium — Priority: High
- **Create landing page** — Size: Small — Priority: High
- **Configure test and lint framework** — Size: Medium — Priority: Medium
- **Setup and configure DBMS on separate server** — Size: Large — Priority: High
- **Configure API access to DB server** — Size: Large — Priority: High
- **Create visualisation dashboard** — Size: Medium — Priority: High
- **Create multi line plot on dashboard (from pre-selected data)** — Size: Large — Priority: High
- **Implement circle pack visualisation** — Size: Large — Priority: High
- **Implement aster plot visualisation** — Size: Large — Priority: High

Sprint 2 (MVP)

- **Utilise student data to render average student consumption** — Size: Large — Priority: Medium
- **Menu to allow the user to select sampling resolution** — Size: Small — Priority: Medium
- **Query the database with the requested resolution and graph the data** — Size: Medium — Priority: High
- **Configure server query system to cater for multiple queries at different dates** — Size: Large — Priority: High
- **Process and visualise collection of queries for different dates** — Size: Large — Priority: High
- **Process and visualise collection of queries for different buildings** — Size: Medium — Priority: High
- **Create popup window with a form** — Size: Small — Priority: Medium
- **Integrate sendgrid API to send logged faults** — Size: Large — Priority: Medium
- **Dropdown menu to select the type of resource wastage** — Size: Small — Priority: Medium
- **Add a field for the location of the fault** — Size: Small — Priority: Medium

Future Development

- **Integrate Open Source Maps API** — Size: Large — Priority: High
- **Outline monitored residences** — Size: Large — Priority: Medium
- **Render colour map of residence consumptions** — Size: Large — Priority: Medium
- **Configure DB API to cater for resource queries** — Size: Medium — Priority: High
- **Process and visualise data by resource type** — Size: Medium — Priority: High
- **Add a location selector using an Open Source Maps API** — Size: Large — Priority: High
- **Create SQL database structure for storing user information** — Size: Large — Priority: Medium
- **Form for registering a new user** — Size: Small — Priority: Medium
- **Store user information in database** — Size: Medium — Priority: Medium
- **Create a login page** — Size: Medium — Priority: Medium
- **Validate login credentials** — Size: Large — Priority: High
- **Redirect user to fault logging system upon successful log in** — Size: Small — Priority: High
- **Create profile page** — Size: Medium — Priority: Medium
- **Form to change password** — Size: Medium — Priority: Medium
- **Store edited password in DB** — Size: Small — Priority: Medium
- **Create user management panel** — Size: Large — Priority: High
- **Enhance user management panel to allow account role creation** — Size: Large — Priority: Medium
- **Implement access rights for each account role** — Size: Medium — Priority: Medium
- **Enhance user management panel to control access rights for users** — Size: Large — Priority: Medium
- **Store all logged fault in database** — Size: Medium — Priority: High
- **Redirect staff member to fault logger upon successful log in** — Size: Small — Priority: Medium
- **Query and display logged faults** — Size: Medium — Priority: High
- **Integrate google sign in API to login and registration page** — Size: Large — Priority: Medium