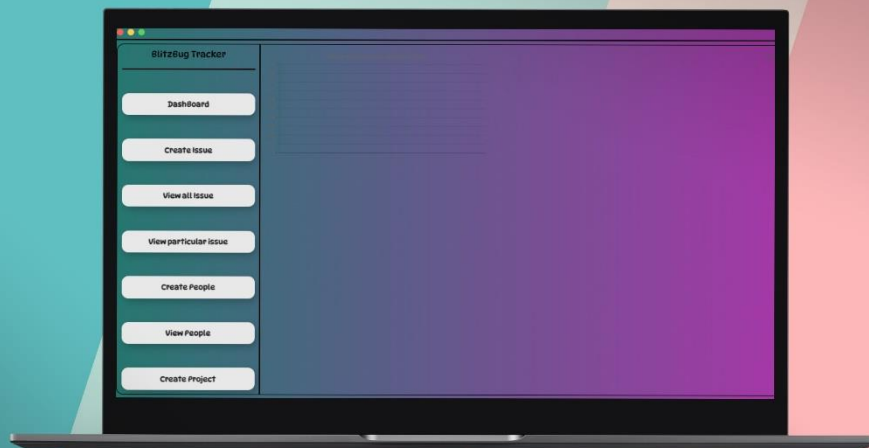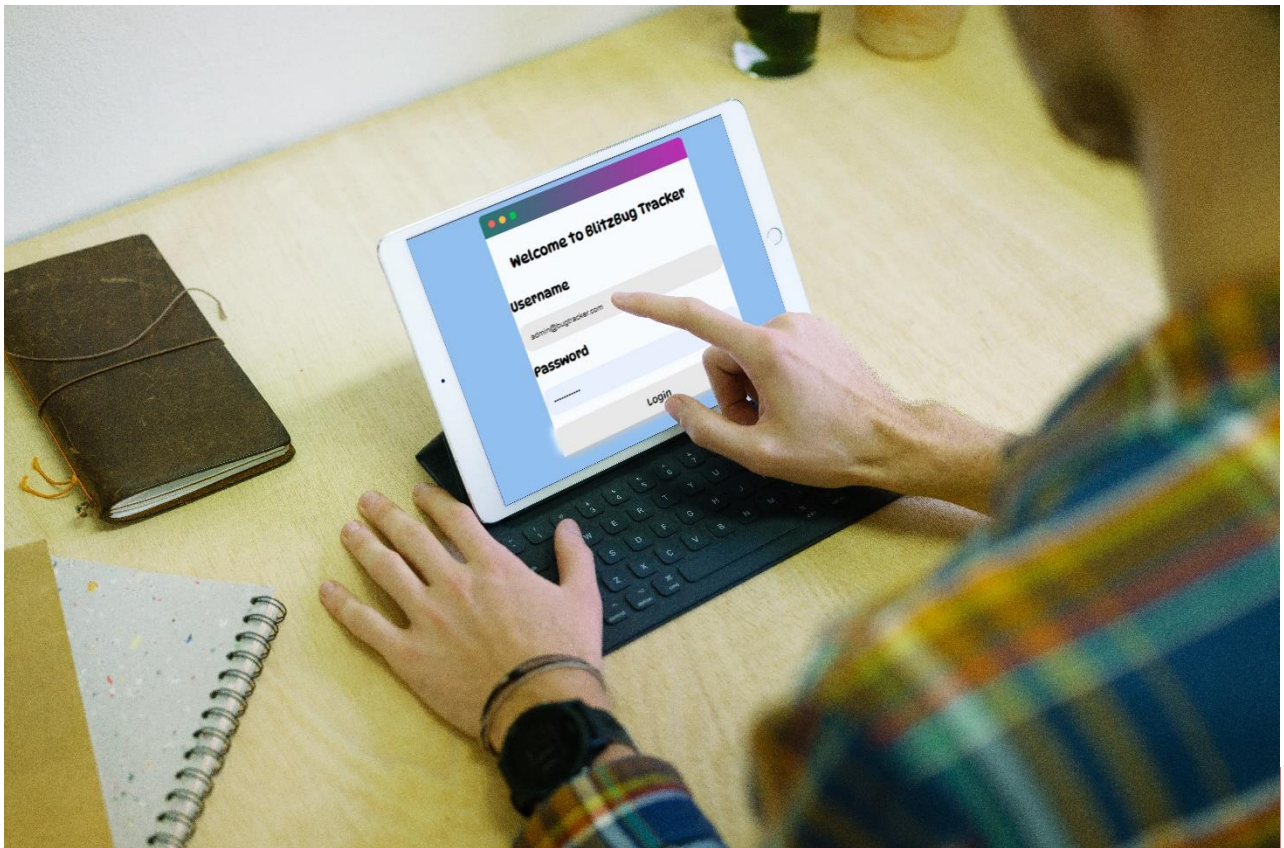# BlitzBug Bug Tracking System 🐛

Web Programming 261

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This short documentaton aims to highlight the implementation and capabilities of the bug tracker

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Introduction: What is a bug tracker?

Bug tracking is the process of lodging and monitoring bugs or errors during software testing. It is also referred to as defect tracking or issue tracking. Large Systems may have hundreds or thousands of defects. Each needs to be evaluated, monitored, and prioritised for debugging. In some cases, bugs may need to be tracked over a long period of time.

Defect tracking is an important process in software engineering, as complex and business critical systems have hundreds of defects" says Tutorials Point. "One of the challenging factors is managing, evaluating and prioritising these defects. The number of defects gets multiplied over a period of time and to effectively manage them, a defect tracking system is used to make the job easier.
BlitzBug tracking system, is a bug tracker developed to make the process of tracking and resolving bugs easier".

BlitzBug Bug Tracker Report

User Interface:

The first thing that can be seen upon launching the bug tracker is the user interface. The bug tracker interface offers a modern yet elegant user interface that provides ease of use to anyone interacting with it. The user interface was done in HTML, CSS and JavaScript. Bootstrap was utilised for achieving a seamless design.

The bug tracker can do the following:

- Can create Users
- Can create Issues
- Can create Projects
- Can view all Issues
- Can edit issues

Access to Bug Tracker
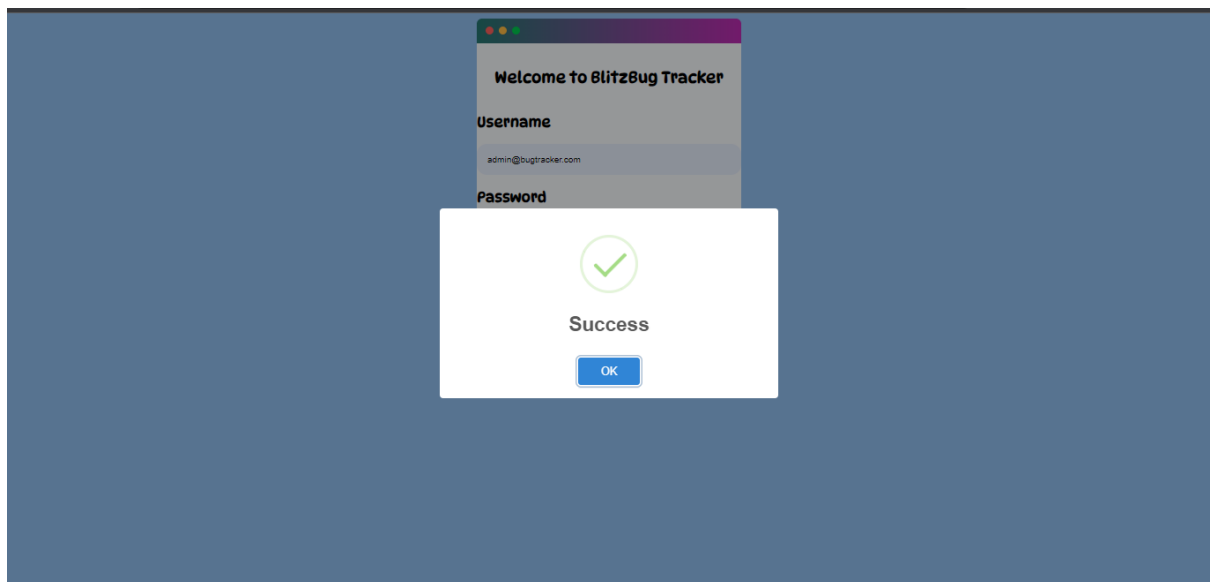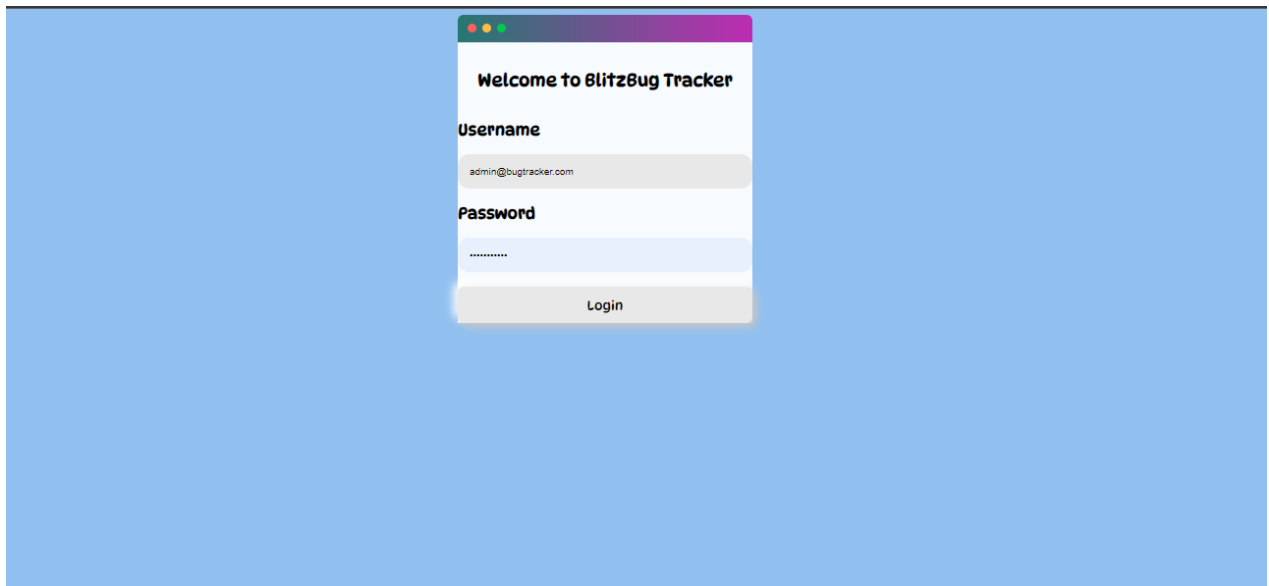
User Login and Authentication:

The Login Section will allow the user to access the bug tracking system. The login section was created for authorization purposes and requires a username and a password to access the bug tracker. The authentication backend was made with firebase which is a comprehensive mobile and web applications platform offered by google.

The default login password and username were set to:

Username: admin@bugtracker,com

Exception handling has been utilised in JavaScript in the event that the user inserts the incorrect password. If the password entered is close enough to the default password the system will allow access if the entered username is correct

Password: Password123

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After logging in and authentication. The bug tracker system will allow the user access to the homepage

Creating Issues

Creating Issue Ticket has the following capabilities:

- The tracker allows the user to add a new issue. The issue ticket includes a summary, description, the date identified, target date and the person to whom the issue is assigned.
- The issue ticket has a ranking from low, medium, and high severity and then assigned to the person responsible for the issue.
- The date in which the issue was created.
- The status of the issue: Open, Closed Resolved
- The Person to whom the issue was assigned.
- The resolution summary

Viewing and editing Issues

Issues can be edited by simply going back to the create issues track and using the reset or by utilising the edit buttons embedded in the system. This will allow the user to modify the issues so the changes can be seen in the View all issues tab.

The view all issues tab includes the following:

- The priority level of the issue highlighted in green
- Information regarding the issue status highlighted in red
- The profile picture of the person who is assigned the issue and which project it relates to
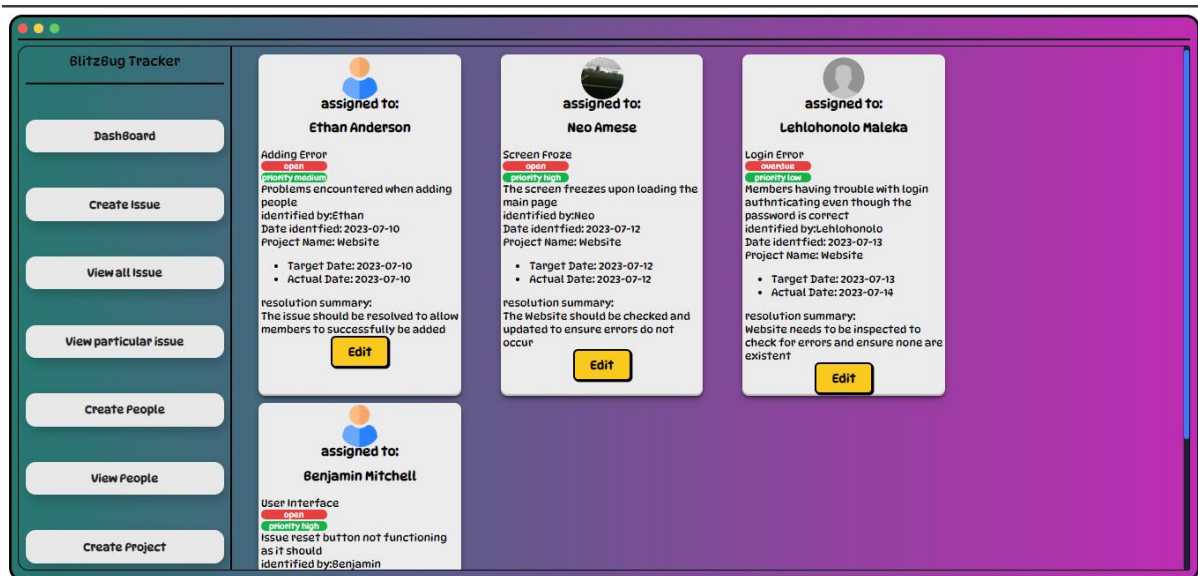
Creating People

In order to assign a person responsible for an issue the create people section allows the populating of people to which an issue can be assigned to

The following capabilities are embedded:

- People can be created using the details, Id, name, email-address,
- A user picture can be added to identify the individual(s)
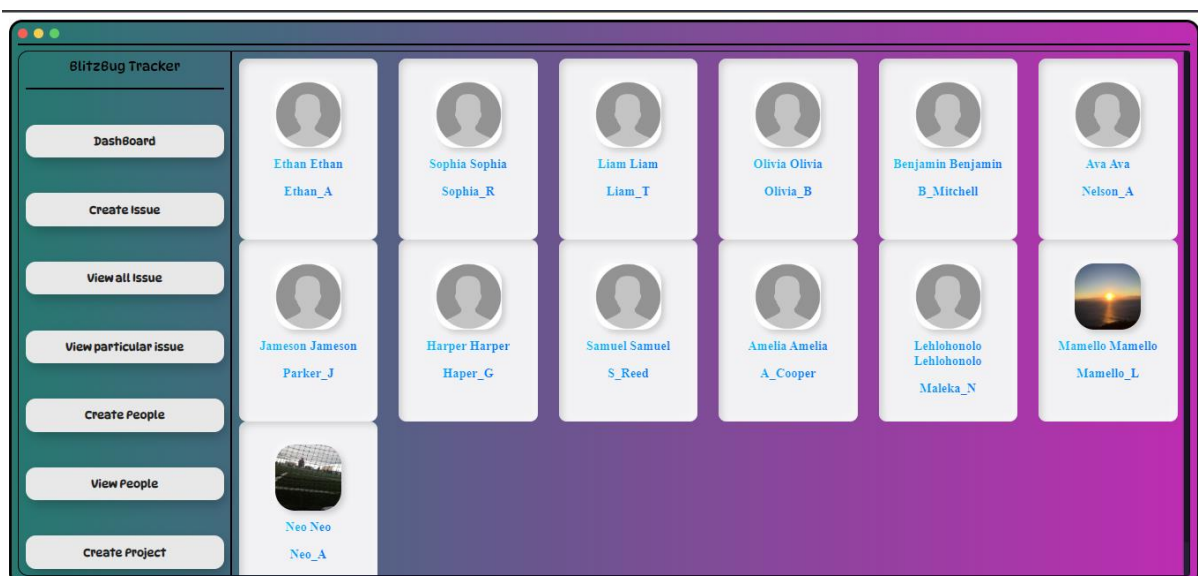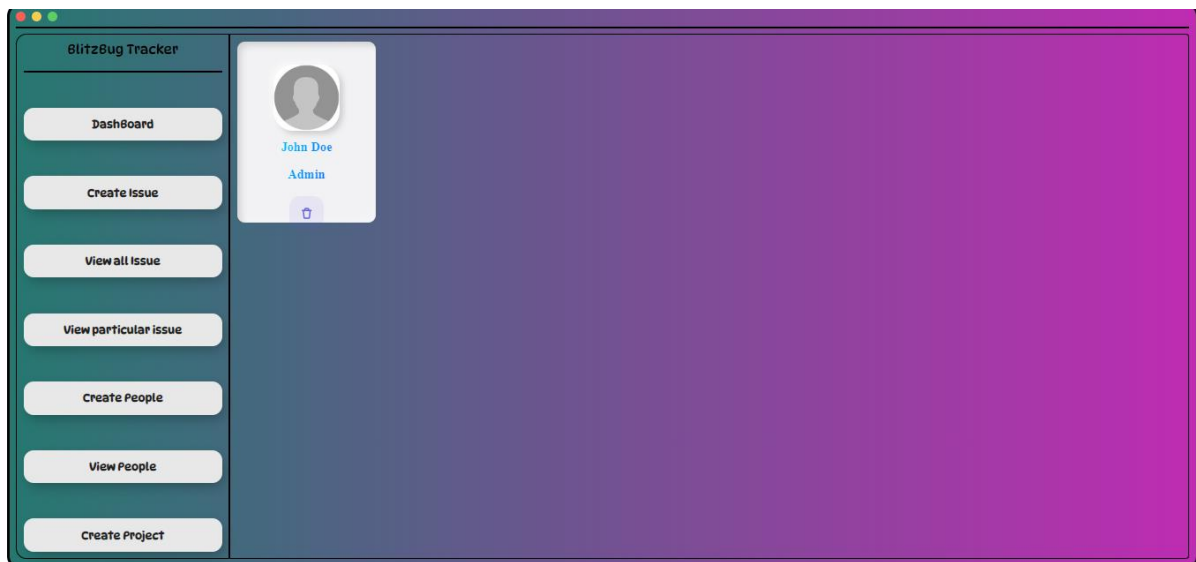- Upon Successful creation a message with a prompt will show up
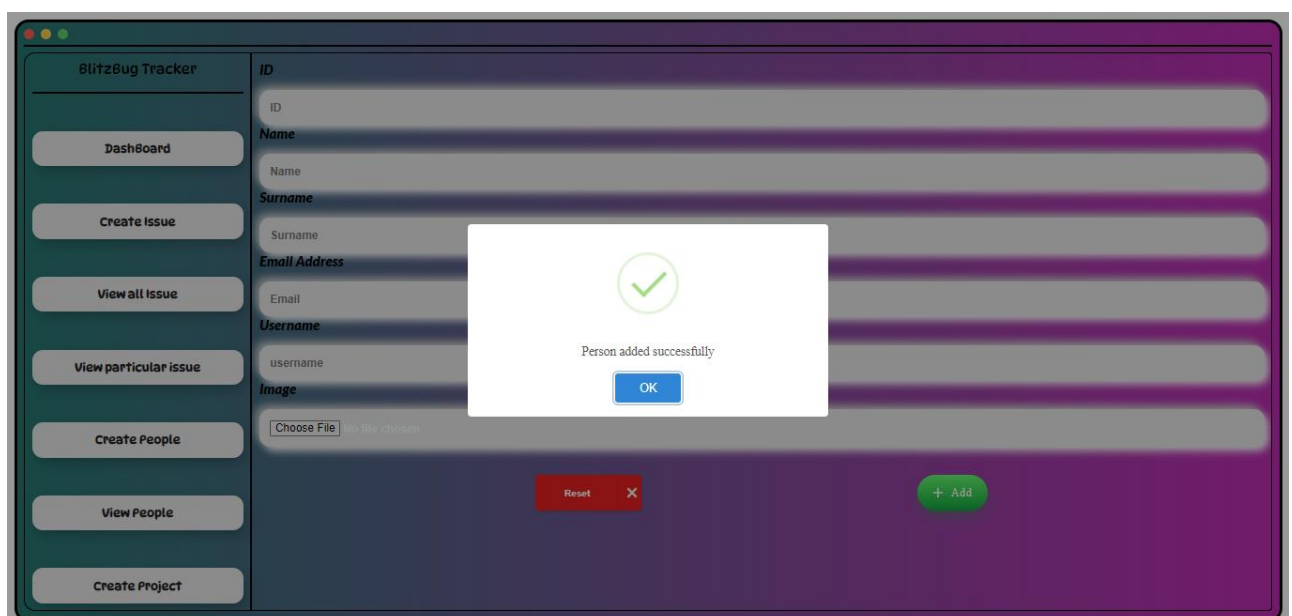
View People

The View people has the following capabilities:

- Allows a user to view the list of people and what(ticket) each individual is responsible for
- A default picture has been added, Once the list of users has been populated then the list of available users can be seen.
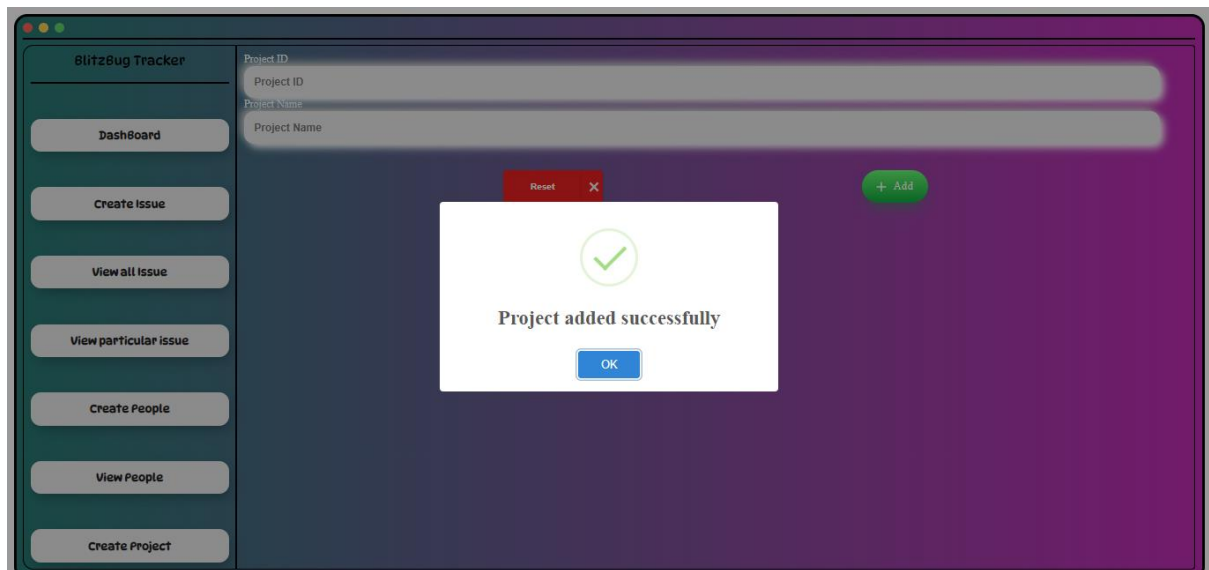- The number of people can be populated up to 20 people
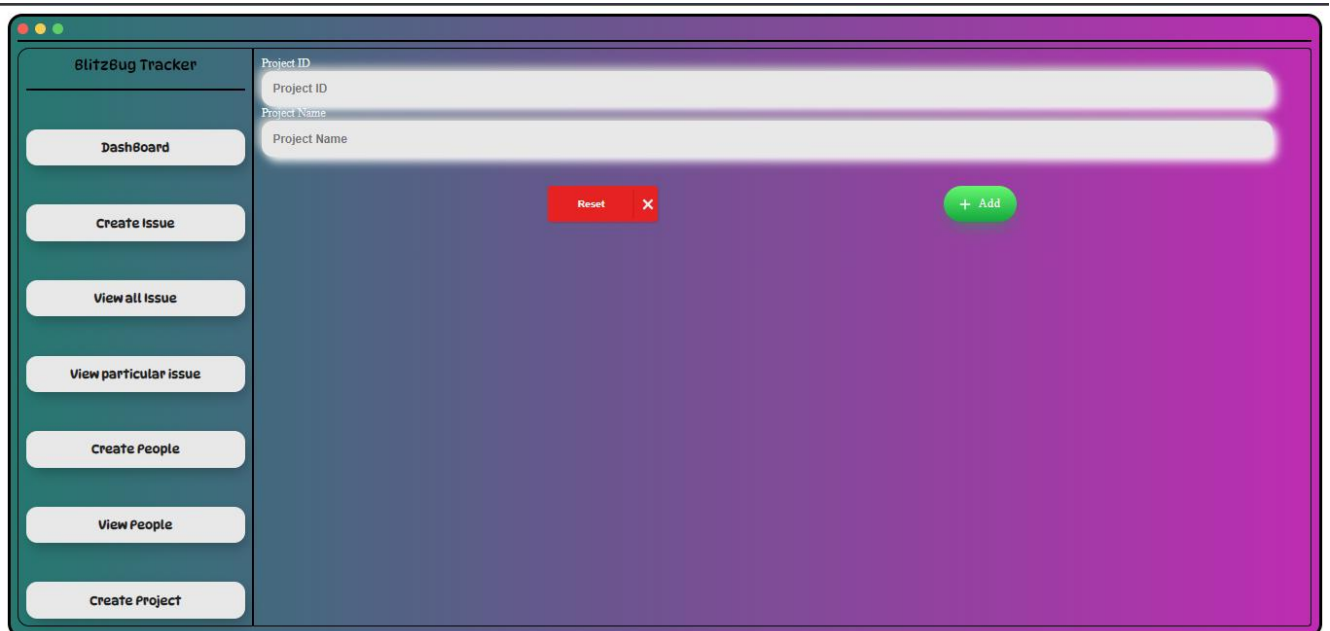

Create Project:

The following is included in the project Section:

- The Project has a project ID and Project Name
- The project can be reset
- A button to add the project and reset it has been included

- Upon Successful creation of a project a prompt message indicating the successful adding of a project will show up

Dashboard

The Dashboard was created with the sole Purpose of reporting the data and analytics to be shown on which issue is open. It provides an extensive overview without having to navigate to each of the tabs.
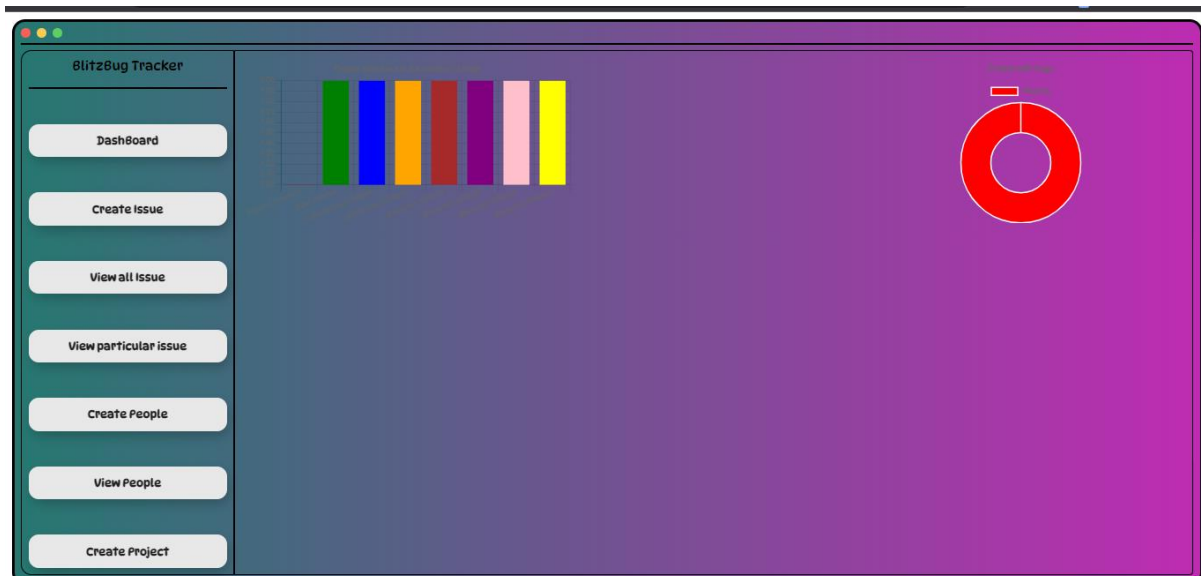
Tools and stack used for the bug tracker

The bug tracker was mostly implemented using html and JavaScript was added for the functionality. A add and reset button was added to allow the user to add an issue and be able to modify it using the buttons.

- HTML for the structure. Html file was linked to the various JavaScript files
- CSS for the styling and creation of the buttons and tabs
- Bootstrap for User Interface
- Firebase for Login Page Authentication and backend storage
- JavaScript for functionality and local storage for storing and retrieving data and information

Thank you!!!!