Test / QA Plan for BuddyStudy

Objective

To create a product that can be used by students who struggle with studying flashcards. The goal is for the product to be stable and reliable so that end users can use this web application seamlessly. We also want to make sure that the app is extendable with future features.

Automated tests

The project will have fully automated unit and integration tests that validate the expected functionality of the backend server. These tests will run while the server is running and will make api calls with both valid and invalid data to make sure that the backend server responds appropriately

Challenge

A major challenge for this web application will be doing automated End-to-End tests that include both the frontend and the backend. Currently we are considering using a web testing tool called Selenium to automatically interact with the web app and simulate a user working with it. When that is implemented, then we can have fully automated testing for the entire system.

Code Reviews

We will configure the github repository to need at least one code review before performing a merge with a branch into the main line. We have gatekeepers for both the frontend and the backend to ensure that the integrity of the system is not compromised when adding new changes.