Testing Plan

Continuous Integration and Continuous Deployment (CI/CD)

Our goal with CI/CD is to create a reliable, automated pipeline that improves the quality of our code and deployment efficiency. Test commits will be used to check the CI/CD pipeline and ensure that every segment is operating as planned. With every commit, the continuous integration (CI) pipeline must be made sure to handle unit and integration tests with robustness. Following any merges into the main branch, CD will verify a smooth and successful deployment to the staging environment. Furthermore, a dependable rollback mechanism will be implemented and evaluated, offering a safeguard against deployment malfunctions and maintaining the authenticity of our operational environment.

Cypress UI Testing

The integrity of user interfaces will be verified by Cypress UI testing, which will be used to create tests that are tailored to the particular needs of Sprint 5. We'll start with smoke tests to ensure that all main functions are performing at their best. Comprehensive regression testing will also be a part of this sprint to ensure that new innovations haven't jeopardized already-existing functionality. In order to ensure that the application displays similar UI behavior and functionality across all browsers and offers a seamless user experience, cross-browser testing is also planned.

Unit Testing

We will thoroughly examine and improve unit tests in the unit testing quadrant to include all of the new elements and tools that were added in Sprint 5. To validate the durability of our code, these tests must cover the whole gamut of possibilities, from favorable to unfavorable ones. By aiming for a high percentage of code coverage, we can strengthen the application's resilience. We will incorporate tests for any issue patches from the previous sprint to further improve the quality of our code. We will try to follow the test-driven development (TDD) technique whenever possible to make sure that our fixes are reliable and don't cause regressions.