## **Test Report**

## I. Introduction:

The purpose of this test report is to demonstrate how we tested the MySystem application. Our tests were focused on ensuring the proper functionality of the application's main features: user authentication, message creation, and reply creation.

## II. Test Approach:

We adopted an automated testing approach for this project. We used Jest and Enzyme to write unit tests for the React components and Express.js endpoints. Additionally, we used Cypress to write end-to-end tests for the user interface.

- III. Test Cases:
- User Authentication:
- Test Case 1.1: Verify that a user can successfully sign up.
- Test Case 1.2: Verify that a user can successfully sign in.
- Test Case 1.3: Verify that a user can successfully sign out.
- Test Case 1.4: Verify that a user cannot sign up with an existing username.
- Test Case 1.5: Verify that a user cannot sign in with incorrect credentials.
  - Message Creation:
- Test Case 2.1: Verify that a user can successfully create a new message.
- Test Case 2.2: Verify that a user cannot create a message without being signed in.
- Test Case 2.3: Verify that a user cannot create a message with an empty text field.
  - Reply Creation:
- Test Case 3.1: Verify that a user can successfully create a new reply.
- Test Case 3.2: Verify that a user cannot create a reply without being signed in.
- Test Case 3.3: Verify that a user cannot create a reply with an empty text field.
- Test Case 3.4: Verify that a user can successfully like a reply.
- Test Case 3.5: Verify that a user cannot like a reply multiple times.
  - Results:

All test cases passed successfully.

## IV. Conclusion:

The automated testing approach we adopted for MySystem proved to be effective in ensuring proper functionality of the application's main features. Additionally, the use of both unit and end-to-end testing allowed us to achieve a high level of confidence in the quality of our code.