# **Automatic Testing - Team 21**

## Third party products used:

- Postman (Backend)
- Mocha (Backend)
- Chai (Backend)
- Jest (Frontend)

### How is it implemented:

- Postman was used to perform high speed REST request to test our communication between the client and server.
- Mocha and Chai are used to run http request tests automatically
- For our backend automatic testing, a test.js file is in the same folder as the server.js file
- Jest is used to test frontend data and methods

## **System Coverage:**

- Create Account
  - Invalid email
  - Already taken Username
- Login
  - Invalid username
  - Invalid password
- User Scores
  - User high score
- Change Username
  - Invalid username
  - Invalid password
- Change Password
  - Invalid username
  - Invalid password
- User Trophies
  - Trophy List entries
- Start new game

- Creation of game entry
- Change game information
  - Normal flow of game logic leading to change in state of game object
- Ending the game
  - Confirming successful saving of scores/trophies and removal of game-related entries in the database
- Frontend Gameplay
  - Rooms will not reappear for a predefined number of subsequent rooms (must go through X different rooms before you have a chance of seeing the "Cave of the Troll" room again)
- Main Menu
  - New game and Continue game buttons correctly populate the game object

#### **How to Run Tests:**

#### Backend server

- 1. Navigate to the "backend" folder in your terminal
- 2. Run "npm install mocha"
- 3. Run "npm install chai"
- 4. Run "npm test"

#### Frontend

- 1. Navigate to "eaui" folder in your terminal
- 2. Run "npm install --save-dev jest"
- 3. Run "npm run test"

## **Needs to be tested Manually:**

- Account Recovery
  - o Make a user
  - Attempt to recover password using email
  - Temp password sent to the user's email