

## Acceptance Tests

### Test A: Login system

- Description
  - Unit test to check account creation and login functionality
- Requirements Tested
  - User Profiles (FR03)
  - Profile Creation (FR04)
- Steps:
  - Create a new user
  - Check that user exists in database
  - Attempt login with incorrect credentials
  - Check that current\_user variable is set to anonymous (login failed)
  - Attempt login with correct credentials
  - Check that current\_user variable matches the newly-created user account

### Test B: Record filing system

- Description
  - Unit test to check basic functionality of record filing system
  - Tests both methods of creating a record (new and from duplicate)
- Requirements Tested
  - Failure Recording (FR01)
  - New from Duplicate (FR02)
- Steps:
  - Attempt to create a failure record with required fields incomplete
  - Check that this attempt results in an error
  - Create a failure record with all required fields
  - Check that the record exists in the database and its fields match what was inputted
  - Duplicate the newly created failure record and modify it
  - Check that the modified record exists in the database and its field matches what was inputted

### Test C: Team Member Actions

- Description
  - System test to check the functionality of actions available to all members
- Requirements Tested
  - Failure Recording (FR01)

- User Profiles (FR03)
- Profile Creation (FR04)
- Personal Dashboards (FR05)
- Commenting (FR06)
- Partial Completion (FR07)
- Status (FR08)
- View Past Failures (FR10)
- Filtered Searching (FR11)
- Bookmarking (FR12)
- Report Generation (FR14)
- Steps:
  - Navigate to register page
  - Create a new user with member role
  - Log in as the new user
  - Click to start a new failure record
  - Partially fill in failure record
  - Save progress and return to dashboard
  - Reopen failure record in progress
  - Check that all the previously completed fields are still present
  - Complete and submit the failure record
  - Add a comment to the record
  - Bookmark the failure record
  - Navigate to user dashboard
  - Check that the bookmarked record is present
  - Run a filtered search with the record information
  - Check that the record is present in search results
  - Check that the record matches what was inputted
  - Check that the status of the record is displayed as 'Incomplete' and the status of the solution is 'Not Implemented'
  - Check that the comment exists and matches what was inputted
  - Return to user dashboard
  - Generate a report of failure records with the newly-created record
  - Check that all of the report elements exist and match the expected values

#### Test D: Team Lead Actions

- Description
  - System test to check the functionality of actions specific to team leads
- Requirements Tested
  - Failure Recording (FR01)

- User Profiles (FR03)
- Profile Creation (FR04)
- Personal Dashboard (FR05)
- Teams Management (FR15)
- Validation (FR16)
- Review (FR17)
- Management Dashboards (FR18)
- Assigning Ownership (FR19)
- Due Dates (FR20)
- Editing Records (FR21)
- Review Dates (FR22)
- Learning Assignment (FR24)
- Steps:
  - Navigate to register page
  - Create and log into account with team lead role
  - Create new team
  - Return to register page
  - Create and log into account with team member role
  - Navigate to personal dashboard
  - Check that the newly-created team is present
  - Request to join newly-created team
  - Make a new failure record
  - Return to login page and log in with team lead account
  - Navigate to management dashboard
  - Check that the team member's join request is present
  - Accept the join request
  - Edit failure record made by team member
  - Validate the edited failure record (input 'yes')
  - Review the edited failure record (input 'yes')
  - Create a new failure record
  - Return to management dashboard
  - Assign the new record to the team member
  - Set a due date for the new record (e.g., 1 week from test time)
  - Set a review date for the new record (e.g., 2 weeks from test time)
  - Assign the previously edited record (already validated and reviewed) to the team member for learning
  - Return to login page and log in with team member account
  - Navigate to personal dashboard
  - Check that the record assigned for learning is present
  - Click on the record and return to personal dashboard
  - Check that the record assigned for learning is marked as read

## Test Materials

- Unit tests: Python unittest module
  - Automated testing of internal systems
- System tests: Selenium web driver
  - Automated testing of end-user experience