Test Plan Identifier

ID: [HH1 – Team Aguacate] Rev. 1.0
Type: Unit Test
Plan Performer: Samuel Rodriguez

References

- Project Proposal Document
- System Design Document

Introduction

This test plan document will outline the procedure to perform unit testing and validation of the functionality of the individual software modules of Team Aguacate's Panda Code Reviews. This document contains information about testing procedure for the Front End Modules.

Test Items

- Navigation bar
    - Link to website homepage
    - Link to home
    - Link to account
    - Login and Logout
- Login and Signup
    - Sign up user
    - Login student and professor
    - Logout student and professor
    - Maintain correct user logged in
- Home
    - Student
        - View number of enrolled courses
        - View number of pending assignments
        - View number of past submissions
        - Link to courses page

- Link to assignments page

- Link to past submissions page

- Link to profile page

- Link to grades page

- Logout student

  o Professor

    - Show professor's created courses

    - Show professor's created assignments

    - Filter professor's created courses

    - Filter professor's created assignments

    - Create Course

    - Create Assignment

    - Link to create course

    - Link to create assignment

    - Create Course

    - Create Assignment

    - Link to individual course

    - Link to individual assignment

- Courses

  o Student

    - Cumulative Courses:

      - Show student's courses

      - Show basic course information

      - Show course assignments

      - Link to individual course

      - Link to individual assignments

      - Filter courses

- Link to enroll courses

- Enroll student

- Individual Courses

  - Show course information

  - Show course assignments

  - Link to individual assignments

  - Filter course assignments

  - Show student's grade

- Professor

  - Cumulative Courses:

    - Show professor's created courses

    - Show number of students for each course

    - Show number of assignments for each course

    - Show table of students for each course

    - Show table of assignments for each course

    - Link to individual assignments

    - Filter courses

    - Link to create course

    - Create course

  - Individual Courses:

    - Show course information

    - Show course assignments

    - Link to individual assignments

    - Link to create course

    - Create course

    - Filter assignments

    - Show course's students

- Show course's submissions
- Assignments
  - Student
    - Cumulative
      - Show pending assignments
      - Show all assignments
      - Filter assignments
      - Link to individual assignments
      - Link to assignments' courses
    - Individual
      - Show assignment information
      - Show student's submissions
      - Show submit button
      - Link to submit form
      - Show student's repository for the assignment
  - Professor
    - Cumulative
      - Show professor's created assignments
      - Link to individual assignments
      - Link to assignment's courses
      - Link to create assignment
      - Create assignment
      - Filter assignments
      - Sort assignment properties
    - Individual
      - Show assignment information
      - Link to add test case

- Show assignment submissions

- Show assignment test cases

- Grades

  o Show student's courses with grades

  o Link to individual courses

- Submissions

Risks Issues

Transmission of insecure data between the front end client and the back end server can lead to information theft on the network level.

Handling of unencrypted and unprivileged data on the front end might cause the user to access unauthorized data.

Inefficient handling of data can lead to crash of a

Features to be tested

- Navigation bar

  o Link home and account to log in when user is logged out

  o Fail log in if user name or password is incorrect

  o Link to student home if a student is logged in

  o Link to professor home if a professor is logged in

- Login and Signup

  o Keep user logged in through pages

  o Disallow a student to view professor links

  o Disallow a professor to view student links

  o Automatically redirect a user to log in if user is logged out during session

- Home

  o Student

    ▪ Show correct number of enrolled courses

    ▪ Show correct number of assignments

- Show correct number of past submissions

- Professor

    - Show all of professor's created courses

    - Show all of professor's created assignments

    - Filter professor's created courses with any entered query

    - Filter professor's created assignments with any entered query

    - Successfully create a course with valid information

    - Successfully create an assignment with valid information

    - Show created courses in drop down when creating an assignment

    - Automatically refresh course list when a course has been added

    - Automatically refresh assignment list when an assignment has been added

- Courses

    - Student

        - Cumulative Courses:

            - Show all of student's enrolled courses

            - Scroll to course information when navigational link is clicked

            - Filter courses with entered query

            - Do not show already enrolled courses in enrolling dialog

            - Automatically refresh page when a student is successfully enrolled in a course

        - Individual Courses

            - Filter course assignments with given query

            - Link to professor's email

            - Show student's correct grade

    - Professor

        - Cumulative Courses:

            - Show all of professor's created courses

- Show correct number of students for each course

- Show correct number of assignments for each course

- Enable show/hide toggle button for student table

- Enable show/hide toggle button for assignment course

- Filter courses with entered query

- Link to create course

- Successfully create a course with valid information

  - Individual Courses:

    - Show/hide course information by selecting tabs

    - Show/hide course assignments by selecting tabs

    - Show/hide course submissions by selecting tabs

    - Link to individual assignments

    - Filter course assignments with given query

- Assignments

  - Student

    - Cumulative

      - Filter assignments with given query

      - Enable a toggle button for pending and all assignments

      - Show all of student's assignments

      - Link to individual assignments and individual courses

    - Individual

      - Show all of student's submissions

  - Professor

    - Cumulative

      - Show all of professor's created assignments

      - Filter assignments with given query

      - Sort assignment table by any property

- Link to both individual assignments and courses.

    - Individual

        - Filter submissions with given query

- Grades

    o Show student's courses with grades

    o Link to individual courses

Features not to be tested

- Submissions – this module depends on integration with back end and repository management.
- Professor Grading – this submodule depends on integration with back end

Approach

General Description

The tests will consist of performing clicks to the front end and analyzing the outcomes against expected browser behavior. The procedure is included in the test procedure plan.

Tools

- **Chrome Browser:** A browser is needed for testing the front end client
- **Chrome Browser Dev Tools:** This will show any underlying errors that occur but are not visible to the main user
- **Firefox Browser:** An additional browser is needed for testing the front end client
- **Firebug plugin for Firefox:** This will show any underlying errors that occur but are not visible to the main user, just like Chrome dev tools

Item Pass/Fail Criteria

For the tests to be performed in the following plan, a feature will *pass* the test *only if the test results match the expected behavior*. If the test result differs from the expected result the test will be considered as *failed*.

Test Deliverables

This test plan will deliver a test procedure plan which will describe the test routine needed to test the individual modules which were described on this document.

Remaining Test Tasks

For the remaining of the project, the remaining tasks will consist of system integration and integration testing of all modules. Some other features might be added as well, and will be tested when created.