

# **System and Unit Test Report**

## **BSOE Course Scheduling App**

### **11/30/2021**

#### **Sprint 1:**

**User Story 1:** As a developer, I want to define a data structure for a course.

**Scenario:** Course defined in the database.

**User Story 2:** As a developer, I want to create a database of classes, so that I can easily access, retrieve, and modify data.

**Scenario:** Database Created

**User Story 3:** As a developer, I want a drop down menu showing me a list of courses for the student to select as taken, so that it can filter the data for classes still needed.

**Scenario:** After logging in, the user can click the edit button next to a cell and select a course from the selection menu.

**User Story 4:** As a student I want to be able to have a list of courses that I am able to take to fulfill my requirement

**Scenario:** To see courses that you are able to take, go to selection menu for that specific term. If a course isn't offered that term, it will warn you about that. To see which courses you need for your requirement, check the requirements page.

**User Story 5:** As a developer, I want to have pseudocode for the logic that describes whether a class can be taken.

**Scenario:** The logic is now programmed into the selection page. It will warn the user if the class has already been taken or if it's not offered that term.

#### **Sprint 2:**

**User Story 1:** As a developer, I want to be able to pull data from the database.

**Scenario:** This was implemented in the program and is done many times by the backend.

**User Story 2:** As a developer, I want to have a template for the display.

**Scenario:** The display has been finished and can be seen when the user logs in.

**User Story 3:** As a user, I want to be able to select which courses I have taken, so that it will show me what classes I still need.

**Scenario:** A logged in user can select the courses they have taken on the schedule. To see some suggestions on what to take next, press generate suggestions. To see what requirements you need to fulfill, check the requirements page.

**User Story 4:** As a user, I want to input my classes.

**Scenario:** Input your classes using the course selection feature by pressing the edit button in the table. It has a page of courses you can take, detailed descriptions of each course, the number of units, and warnings if you already took it or it isn't offered that term.

### **Sprint 3:**

**User Story 1:** As a user, I want to be able to access an about page, to read about the application, who made it, and how to use it. This should give the user a better understanding of how to use the software so they make the best use of it.

**Scenario:** To find the about page go to bottom right of the index page once you log in. You can navigate to the about page and back whenever you want using the buttons.

**User Story 2:** As a user, I want to be able to press a button and have the program recommend 3 classes that I haven't taken yet based on my major. This is so that the user can have some helpful suggestions on what classes they should take.

**Scenario:** Once you enter all the classes you took up to this point into the table go to the bottom right and press generate suggestions. This will give you a list of classes for you major that you didn't take and that are specifically available for next quarter (which is also displayed)

**User Story 3:** As a user, I want to go to the class selection page and only be able to select classes that are available that term, and ones I haven't taken yet. This should make planning the schedule more informative since the user will get feedback from the UI on what is a valid selection.

**Scenario:** The selection page will warn you if you have already taken the class or if it isn't available that term, so that you know not to select it if you are planning your schedule.

**User Story 4:** As a user, I want to be able to press a button and see what requirements still need to be fulfilled for my major. This will make it easier for the user to have an idea of what courses they still need to take.

**Scenario:** On the bottom of the page press the CS Requirements button. You can see the CS requirements there so you know what courses to select. You can navigate to that page and back whenever you want.

**User Story 5:** As a user, I want to be able to see a longer description of each course when I click it in the course selection page.

**Scenario:** The selection page has a dropdown which shows the detailed course description for all courses.

**User Story 6:** As a user, I want to be able to login as an admin. This would enable editing the database of classes offered and requirements without changing the code.

**Scenario:** Use one of the admin accounts we registered offline to login instead of a standard account. You will see a UI for adding, editing and deleting courses and requirements. Credentials: [a@gmail.com](mailto:a@gmail.com) password:123456

#### **Sprint 4:**

**User Story 1:** As a student, I would like to know the number of units in each course, so that I can plan my schedule accordingly.

**Scenario:** When you are selecting courses, the unit count is displayed next to them. It is also displayed on the main page once you select the course. On the bottom right you can see total units taken based on the courses you selected.

**User Story 2:** As an advisor, I would like to edit course information, so that I can keep all the information updated.

**Scenario:** In the admin page, click add course to add a course, click edit button to edit a course, and click the trash icon to delete it. You can do the same thing with requirements.

**User Story 3:** As a student, I would like to see course suggestions, so that I know what courses I still need to take.

**Scenario:** To see course suggestions, press generate suggestions on the bottom left of the index page. It will show you courses that you didn't take and that are available for next term. To see what requirements you need to fulfill, check the requirements page.

**User Story 4:** As a student, I would like to see all features, so that I will have a perfect user experience. (Integrate all features)

**Scenario:** All the features have been integrated into the 1.0 release of BSOE Course Scheduling App.