# **Class Constructor Test Cases**



| Priority Value | Description   |
|----------------|---|
| 1              | Necessary - Required for the project to function correctly.   |
| 2              | <b>Central</b> - Central to the core functionality of the project, but not necessary for the project to function. |
| 3              | Additive - Adds on functionality which is useful; however, not necessary.   |

| Status          | Description              |
|-----------------|--------------------------|
| Incomplete      | Has not been started.    |
| In Progress     | Currently in progress.   |
| Completed       | Has been implemented.    |
| Not Implemented | Will not be implemented. |

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# Glossary

| Word              | Definition   |
|-------------------|--|
| Account           | The collection of the credentials, settings, and all stored information for a User.  |
| System            | Collective term for all non-User elements of the Application.  |
| Class             | A component that represents the intersection of a Teacher, Course, and Time (Quarter).   |
| Complete (Course) | A Course that has been completed by taking and passing a class it was associated with and is now considered finished for the sake of identifying Course prerequisites. |
| Course            | An area of academic study classified in the Course Catalog as approved by UCSD. Generally identified by the class listing with the catalog, such as CSE 110.           |
| Credentials       | Associated with the Account, these represent User-defined login information for access to the System.  |
| Incomplete        | A Course which has not been marked as completed and is not considered a complete prerequisite for other listed classes.  |
| Instructor        | Official UCSD staff member who leads instruction for one or more Classes.  |
| Export Format     | A file format exported by the System, pdf.   |
| Quarter           | A collection of Courses connected by being taken during the same period of time.   |
| Schedule          | A collection of one or more Quarters that represents a linear chronological progression the User intends to take.  |
| Settings          | Additional information stored for each Account including major, minor, year, and college.  |

# **Pages**

| Landing Page           | The initial screen/GUI that a User is redirected to after logging in.                            |
|------------------------|--|
| Home Page              | Synonym for Landing Page.  |
| Settings Page          | The Page in which a logged in User can view and edit their settings.                             |
| Academic Progress Page | The Page in which a logged in User can view and edit their Academic History.                     |
| Quarter Page           | The Page, opened within a Schedule Page, which allows a User to edit and view a specific Quarter |
| Login Page             | The initial Page in which a User can login to the application.                                   |

# Actors

| User           | The end User of the System (student, counselor, other) who wants to be able to plan their Schedule or use other utilities made available through the application. |
|----------------|---|
| Google Account | A valid Google Account is defined by OAuth functionality as credentials for which OAuth returns "True".   |

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# **Test Cases**

| Title                | TC-1: Login / Create Account   |
|----------------------|--|
| Priority             | 1  |
| Status               | Incomplete   |
| Description          | This test case outlines the process through which a User logs into their Account to access their personal data.  |
| User Goal            | The User wants to access their personal data.  |
| Desired Outcome      | The User is logged into their appropriate Account.   |
| Actor                | User   |
| Dependent Test Cases |  |
| Requirements         | SR - 1 (Login/Create Account)  |
| Pre-conditions       | <ol> <li>The User is on the Login Page.</li> <li>The User has valid google credentials.</li> </ol>   |
| Post-conditions      | The User is signed into an existing Account or a new Account is added to the System if the User created an Account, and the Account is valid.  |
| Trigger              | The User wants to interact or view their Schedules and stored information.   |
| Workflow             | <ol> <li>The User shall select the "Google Login" button.</li> <li>The System shall display a pop-up with a list of Google Accounts associated with the browser.</li> <li>The User shall select the "Use another Account" button.</li> <li>The User shall login using the following credentials:         <ul> <li>a. Username: cselloclassconstructor@gmail.com</li> <li>b. password: Gillespiel10!</li> </ul> </li> <li>The User shall select the "Next" button.</li> <li>The System shall display the Landing Page.</li> </ol> |
| Alternate Workflow   | The User's Google ID is not associated with an Account on the System: 6. The System shall create an Account with no information for the User. 7. The System shall return the User to step 7 of the primary workflow.   |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User is on the Home Page.  2. The taskbar displays the User's first and last name.  Alternate Workflow:  1. A new Account is added to the System for the User.  2. The User is on the Home Page.  |

3. The taskbar displays the User's first and last name.

| Title                | TC-2: Logout of Account   |
|----------------------|---|
| Priority             | 1   |
| Status               | Incomplete  |
| Description          | This test case describes the process by which a User logs out of their AAccount.  |
| User Goal            | The User wants to log out of the System   |
| Desired Outcome      | The User is no longer logged into their AAccount and is taken to the Login Page.  |
| Actor                | User  |
| Dependent Test Cases | TC-1(Login/Create Account)  |
| Requirements         | SR-1(Login/Create Account), SR-2(Logout of Account)   |
| Pre-conditions       | 1. The User is logged into their Account.   |
| Post-conditions      | When the User copies the URL "www.classconstructor.com" they are brought to the Login Page without any Account information available.   |
| Trigger              | The User is done interacting with the System.   |
| Workflow             | <ol> <li>The User shall select the Logout button from the taskbar.</li> <li>The System shall log the User out of their Account.</li> <li>The System shall redirect the User to the Login Page.</li> </ol> |
| Alternate Workflow   |   |
| Expected Outcome     | <ul><li>The test passes when</li><li>1. The System is displaying the Login Page.</li><li>2. The User is unable to access any other Page without logging in (TC-1).</li></ul>                              |

| Title               | TC-3: Delete Account  |
|---------------------|---|
| Priority            | 1   |
| Status              | Incomplete  |
| Description         | This test case tests the process by which a User removes their Account and all of its associated data from the System.  |
| User Goal           | The User wishes to remove their Account from the System permanently.  |
| Desired Outcome     | The System no longer recognizes the User's Credentials as a valid Account, and all information related to that Account is removed from the System.  |
| Actor               | User  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-4(Edit Settings)   |
| Requirements        | SR-1(Login/Create Account), SR-2(Logout of Account), SR-3(Change Settings)  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Settings Page.</li> </ol>   |
| Post-conditions     | <ol> <li>The User's Account is deleted.</li> <li>The User is redirected to the Login Page.</li> </ol>   |
| Trigger             | The User is permanently done interacting with the System.   |
| Workflow            | <ol> <li>The User shall enter Computer Science' in the "Major" input field.</li> <li>The User shall select the "Links" button on the taskbar.</li> <li>The System shall display a pop-up menu prompting the User for input.</li> <li>The User shall select the "Save Changes" button.</li> <li>The User shall select the "Settings" button on the taskbar.</li> <li>The User shall select the "Delete Account" button.</li> <li>The System shall prompt the user to confirm their selection.</li> <li>The User shall select the "Confirm" button.</li> <li>The System shall log the User out of their Account.</li> <li>The System shall delete the User's Account and all information associated with it, including the User's Google ID.</li> <li>The System shall return the User to the Login Page.</li> <li>The User shall follow the steps in TC-1 to Login/Create Account.</li> <li>The User shall select the 'Settings' button on the taskbar.</li> </ol> |
| Alternate Workflow  | The User chooses to cancel their request to delete their Account: 4. The System shall return the User to the Settings Page.   |
| Expected Outcome    | The test passes when  Main Workflow:  1. The 'Major' text field is blanky  Alternate Workflow:  1. The 'Major' text field is still populated with 'Computer Science'  |

| Title               | TC-4: Edit Settings   |
|---------------------|---|
| Priority            | 1   |
| Status              | Incomplete  |
| Description         | This test case tests the process by which the User can edit personal Settings associated with their Account.  |
| User Goal           | The User wishes to update the Settings stored for their Account.  |
| Desired Outcome     | The User has updated their Account Settings.  |
| Actor               | User  |
| Dependent Use Cases | TC-1(Login/Create Account)  |
| Requirements        | SR-1(Login/Create Account), SR-3(Edit Settings)   |
| Pre-conditions      | <ol> <li>The User is logged in as described in TC-1.</li> <li>The User is on the Settings Page.</li> </ol>  |
| Post-conditions     | One or more of the User's Settings are changed to the new value(s) entered.   |
| Trigger             | The User wishes to change the Settings associated with their Account.   |
| Workflow            | <ol> <li>The User shall enter 'Computer Science' in the "Major" input field.</li> <li>The User shall select the "Links" button on the taskbar.</li> <li>The System shall display a pop-up menu prompting the User for input.</li> <li>The User shall select the "Save Changes" button.</li> <li>The System shall update the Settings associated with the current Account.</li> <li>The User shall select the "Settings" button on the taskbar.</li> </ol> |
| Alternate Workflow  | User selects "Don't Save Changes" button: 4. The System shall navigate to the "Links" Page without changing any User settings. 5. The User shall select the "Settings" button on the taskbar.  User selects "Stay on Page" button: 4. The System shall return the User to the Settings Page.  |
| Expected Outcome    | The test passes when  Main Workflow:  1. The "Major" text field is populated with 'Computer Science'.  User selects "Don't Save Changes" button:  1. The "Major" text field is populated with the value it held prior to step 1   |

## in the workflow

User selects "Stay on Page" button:
1. The "Major" text field is populated with 'Computer Science'

| Title               | TC-5: Import Academic History (External)   |
|---------------------|--|
| Priority            | 2  |
| Status              | Incomplete   |
| Description         | This test case tests the process through which the User can import their academic history from outside the System.   |
| User Goal           | The User wants to import their academic history for reference when building Schedules by both the System and the User.   |
| Desired Outcome     | The System marks all Courses listed in the imported file as Completed for the current Account.   |
| Actor               | User   |
| Dependent Use Cases | TC-1(Login/Create Account), TC-6 (View Academic History)   |
| Requirements        | SR-1(Login/Create Account), SR-3(Edit Settings), SR-5(Import Courses from Degree Audit), SR-7(Mark Course as Complete), SR-8(Mark Course as Incomplete)  |
| Pre-conditions      | <ol> <li>The User is logged in as described in TC-1.</li> <li>The User is on the Academic Progress Page.</li> <li>The User has their UCSD degree audit .html file locally available.</li> </ol>  |
| Post-conditions     | The System now associates the specified Courses with the current Account as Completed.   |
| Trigger             | The User wants to have their academic history stored in the System to allow for Course checking and suggestions.   |
| Workflow            | <ol> <li>The User shall select the "Import Academic History" button.</li> <li>The System shall present the User with a prompt detailing how to retrieve their academic history from the UCSD website, and a button to select the file.</li> <li>The User shall select the "Select File" button.</li> <li>The User shall select their UCSD degree audit .html file from the local System dialog.</li> <li>The System shall display to the User a complete list of Courses on the academic history, and prompt the User to confirm the list of Courses.</li> <li>The User shall select the "Confirm" button to confirm an accurate import.</li> <li>The System shall mark the listed Courses as Completed by the current Account.</li> </ol> |

#### Alternate Workflow

#### The User attempts to upload an invalid import file:

- 5. The System shall inform the User that an error has occurred, prompting them to resubmit.
- 6. The User shall select the "Resubmit" button.
- 7. The System shall redirect the User to step 7 of the standard workflow.

### The Courses selected do not include all prerequisite Courses:

- 5. The System shall notify the User that prerequisites are incomplete.
- 6. For each Course affected, the System shall display a list of available prerequisites to mark as Complete.
- 7. The User shall resolve conflicts by selecting the "Complete" button, "Ignore this Course" button, or "EasyE" button for each Course.
- 8. Resume main workflow at step 5.

## Expected Outcome

#### The test passes when...

#### Main Workflow:

- 1. The 'Completed' section of the Academic History Page contains entries for each Course marked as Completed in the uploaded degree audit.
- 2. The 'In Progress' section of the 'Academic History' Page contains entries for each Course marked as 'In Progress' in the uploaded degree audit
- 3. The 'Incomplete' section of the 'Academic History' Page contains entries for each Course marked as 'Incomplete' in the uploaded degree audit.

#### The User attempts to upload an invalid import file:

1. The Academic History Page is displayed and is populated the same as it was before step 1.

#### The Courses selected do not include all prerequisite Courses:

- 1. The 'Completed' section of the 'Academic History' Page contains entries for each Course marked as Completed in the uploaded degree audit or marked as Complete manually by the User.
- 2. The 'In Progress' section of the 'Academic History' Page contains entries for each Course marked as 'In Progress' in the uploaded degree audit.
- 3. The 'Incomplete' section of the 'Academic History' Page contains entries for each Course marked as 'Incomplete' in the uploaded degree audit except for any Courses marked as Complete manually by the User.

| Title                | TC-6: View Academic History  |
|----------------------|--|
| Priority             | 3  |
| Status               | Incomplete   |
| Description          | This test case details how a User may view their current academic history including their degree progress and previous Quarter information.  |
| User Goal            | The User wishes to find out how many more Courses and Quarters are needed to graduate and information about previously finished Quarters.  |
| Desired Outcome      | The User is shown their current degree percentage complete, remaining Courses, and statistics about previous Quarters.   |
| Actor                | User   |
| Dependent Test Cases | TC-1 (Login/Create Account), TC-4 (Edit Settings)  |
| Requirements         | SR-1(Login/Create Account), SR-6(View Courses Required for Graduation), SR-17(View Remaining Required Courses)   |
| Pre-conditions       | <ol> <li>The User is logged in as described in TC-1.</li> <li>The User is on the Academic History Page.</li> </ol>   |
| Post-conditions      | The User has been shown completion status based on current input information.  |
| Trigger              | The User wishes to see their overall progress towards their graduation requirements.   |
| Workflow             | <ol> <li>The User shall select the "Academic History" taskbar button.</li> <li>The System shall render a Page listing "CSE 101" under the Account's<br/>Complete Courses and "CSE 110" under the Account's in-progress<br/>Courses.</li> </ol> |
| Alternate Workflow   |  |
| Expected Outcome     | <ul> <li>The test passes when</li> <li>1. The Academic History Page displays "CSE 101" under the Account's Completed Courses and "CSE 110" under the Account's in-progress Courses.</li> </ul>   |

| Title                | TC-7: Show Related Links for Major / College  |  |  |
|----------------------|---|--|--|
| Priority             | 3   |  |  |
| Status               | Incomplete  |  |  |
| Description          | This test case details how a User may access a single Page containing external links based on input information about current major/current college from Account Settings, along with contact information for academic counseling and assistance. |  |  |
| User Goal            | To find a central place for important links based on personal situations and input preferences.   |  |  |
| Desired Outcome      | The User is shown a Page of links to official UCSD resources.   |  |  |
| Actor                | User  |  |  |
| Dependent Test Cases | TC-1 (Login/Create Account)   |  |  |
| Requirements         | SR-1(Login/Create Account), SR-3(Change Settings), SR-4(Show Departmental Links), SR-35 (Departmental Contact Information)  |  |  |
| Pre-conditions       | 1. The User is logged in as described in TC-1.  |  |  |
| Post-conditions      | <ol> <li>The System displays the Links Page containing relevant links for the<br/>Account's major and college.</li> </ol>   |  |  |
| Trigger              | The User wishes to find links to other websites to learn about relevant information.  |  |  |
| Workflow             | <ol> <li>The User shall select the "Links" taskbar button.</li> <li>The System shall render the Links Page.</li> </ol>  |  |  |
| Alternate Workflow   |   |  |  |
| Expected Outcome     | <ul> <li>The test passes when</li> <li>1. The User is presented with the Links Page, containing information related to the Account's major, college, and academic counseling contacts.</li> </ul>   |  |  |

# **Schedule Handling**

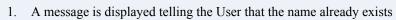
| Senedule Handling    |  |  |  |
|----------------------|--|--|--|
| Title                | TC-8: Create Schedule  |  |  |
| Priority             | 1  |  |  |
| Status               | Incomplete   |  |  |
| Description          | This test case details the process through which a User creates a Schedule.  |  |  |
| User Goal            | The User wants to create a potential Schedule of the Quarters and Courses they will take.  |  |  |
| Desired Outcome      | The System stores a new Schedule for the User's Account.   |  |  |
| Actor                | User   |  |  |
| Dependent Test Cases | TC-1(Login/Create Account)   |  |  |
| Requirements         | SR-1(Login/Create Account), SR-3(Change Settings), SR-9(Create Schedule)   |  |  |
| Pre-conditions       | 1. The User is logged in as described in TC-1.   |  |  |
| Post-conditions      | <ol> <li>The User is taken to the View Schedule Page for the new Schedule.</li> <li>The System stores a new Schedule associated with the User's Account.</li> </ol>  |  |  |
| Trigger              | The User wants to create a new Schedule.   |  |  |
| Workflow             | <ol> <li>The User shall select the "Create New Schedule" button.</li> <li>The User shall set the following options:         <ul> <li>a. Name (required): 'Test Schedule'</li> <li>b. Beginning Quarter (FA18, WI19, SP19,) (optional): 'SP19'</li> </ul> </li> <li>The User shall select the "Confirm" button.</li> <li>The System shall take the User to the View Schedule Page for the new Schedule.</li> <li>The new Schedule shall be titled 'Test Schedule' with initial Quarter "SP19."</li> </ol> |  |  |
| Alternate Workflow   | The User selects the "Cancel" option: 4. The User shall select the "Cancel" button. 5. The System shall close the pop-up window.   |  |  |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User is redirected to the new Schedule Page, which is titled "Test Schedule" with the beginning Quarter labelled "SP19."  Alternate Workflow:  1. The pop-up window is closed. 2. The User remains on the previous Schedule Page. 3. The System does not show any Schedule titled "Test Schedule" with initial Quarter "SP19" on the Page.  |  |  |

| Title                | TC-9: Open Schedule  |  |  |
|----------------------|--|--|--|
| Priority             | 1  |  |  |
| Status               | Incomplete   |  |  |
| Description          | This test case outlines the process through which a User opens an existing Schedule for editing or viewing.  |  |  |
| User Goal            | The User wants to open a Schedule for interaction.   |  |  |
| Desired Outcome      | The User will be at the view Schedule Page for the selected Schedule.  |  |  |
| Actor                | User   |  |  |
| Dependent Test Cases | TC-1(Login/Create Account), TC-8(Create Schedule)  |  |  |
| Requirements         | SR-1(Login/Create Account), SR-9 (Create Schedule), SR-10(Save Schedule)   |  |  |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User has created one Schedule named "Test Schedule" as described in TC-8.</li> </ol>  |  |  |
| Post-conditions      | 1. The User is on the Schedule Overview Page for the test Schedule.  |  |  |
| Trigger              | The User wants to open a Schedule for planning.  |  |  |
| Workflow             | <ol> <li>The User shall select the "Test Schedule" Schedule from the list of displayed Schedules on the left taskbar.</li> <li>The System shall redirect the User the Schedule Page of "Test Schedule".</li> </ol> |  |  |
| Alternate Workflow   | The "Test Schedule" is already open:  2. The System shall remain on the "Test Schedule" Schedule Page.   |  |  |
| Expected Outcome     | The test passes when  Main Workflow:  1. The System renders the Schedule Page containing "Test Schedule", a new empty Schedule.  |  |  |
|                      | Alternate Workflow: 1. The System stays on the "Test Schedule" Schedule Page.  |  |  |

| Title               | TC-10: Close Schedule  |  |
|---------------------|--|--|
| Priority            | 1  |  |
| Status              | Not Implemented  |  |
| Description         | This test case outlines the process through which a User can close a Schedule and return to the Landing Page.  |  |
| User Goal           | The User wants to close the currently open Schedule.   |  |
| Desired Outcome     | The currently open Schedule is closed and the System returns the User to the landing Page.   |  |
| Actor               | User   |  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule), TC-11(Save Schedule)   |  |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), SR-10(Save Schedule), SR-11(Name Schedule)  |  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account described in TC-1.</li> <li>The User is on the view Schedule Page for "Test Schedule" from TC-8 and TC-9.</li> </ol> |  |
| Post-conditions     | 1. The User is redirected to the landing Page.   |  |
| Trigger             | The User wants to close their current Schedule.  |  |
| Workflow            | <ol> <li>The User shall select the close button on the "Test Schedule" view Page.</li> <li>The System shall return the User to the landing Page.</li> </ol>            |  |
| Alternate Workflow  |  |  |
| Expected Outcome    | The test passes when  1. The User is on the landing Page.  2. The User reopens the "Test Schedule" and it is the same as they left it.                                 |  |

| Title               | TC-11: Save Schedule  |  |  |
|---------------------|---|--|--|
| Priority            | 1   |  |  |
| Status              | Incomplete  |  |  |
| Description         | This test case outlines the process through which a User can save changes made to an open Schedule.   |  |  |
| User Goal           | User wants to be able to save the currently open Schedule.  |  |  |
| Desired Outcome     | All changes to the current Schedule are stored.   |  |  |
| Actor               | User  |  |  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule), TC-12(Name Schedule)  |  |  |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), SR-10(Save Schedule), SR-11(Name Schedule)   |  |  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the view Schedule Page for "Test Schedule."</li> </ol>  |  |  |
| Post-conditions     | 1. All details of the Schedule are saved to the System.   |  |  |
| Trigger             | The User wants to ensure changes to a Schedule are saved.   |  |  |
| Workflow            | <ol> <li>The User shall change the name of the current Schedule to 'CSE Major'.</li> <li>The User shall select the "Save" button on the "Test Schedule" Schedule Page.</li> <li>The System shall save the Schedule under the test Account.</li> <li>The System shall display a message notifying that the Schedule has been saved.</li> <li>The User shall refresh the view Schedule Page.</li> </ol> |  |  |
| Alternate Workflow  |   |  |  |
| Expected Outcome    | The test passes when  Main Workflow:  1. The User is on the "CSE Major" view Schedule Page.  2. The System does not have a "Test Schedule" Schedule listed in the taskbar.  |  |  |

| Title                | TC-12: Name Schedule  |  |  |
|----------------------|---|--|--|
| Priority             | 1   |  |  |
| Status               | Incomplete  |  |  |
| Description          | This test case outlines the process through which the User changes the name of their Schedule.  |  |  |
| User Goal            | The User wants to be able to rename their Schedule.   |  |  |
| Desired Outcome      | The User renames their Schedule and it is saved.  |  |  |
| Actor                | User  |  |  |
| Dependent Test Cases |   |  |  |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-10(Save Schedule), SR-11(Name Schedule)   |  |  |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Schedule Page.</li> </ol>   |  |  |
| Post-conditions      | 1. The Schedule has a new name specified by the User.   |  |  |
| Trigger              | The User wants to change the name of their Schedule.  |  |  |
| Workflow             | 1. The User shall select the "C.S.E Schedule" button.  2. The User shall select the name field of the Schedule in the View  Schedule  C.S.E. Schedule  Math C.S. Schedule  Schedule Page.  3. The User shall enter the new Schedule name they wish to set.  Gary's Schedule  4. The User shall select outside the currently active text box.  5. The System shall change the name of the Schedule.  6. The System shall update the Schedule name in the taskbar |  |  |
| Alternate Workflow   | Schedule name is taken by a previously saved Schedule:  4. The System shall notify the User that the name is unavailable.  5. The System shall not update the Schedule name.  Name includes unsupported characters or symbols:  4. The System shall notify the User that the name is unavailable.  5. The System shall not update the Schedule name.  |  |  |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User changes the Schedule name and the change persists.  2. The taskbar Schedule updates with the new name.  Alternate Workflow:   |  |  |



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| Title                | TC-13: Export Schedule  |  |
|----------------------|---|--|
| Priority             | 1   |  |
| Status               | Incomplete  |  |
| Description          | This test case documents the exporting of the Schedule from the System in pdf form.   |  |
| User Goal            | The User wants to save a copy of a Schedule in a format accessible outside the System.  |  |
| Desired Outcome      | The User has a separate file or set of files that contains the data of their Schedules that is not internal to the System.  |  |
| Actor                | User  |  |
| Dependent Test Cases | TC-8(Create Schedule), TC-11(Save Schedule)   |  |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-10(Save Schedule), SR-11(Name Schedule), SR-12(Download Schedule)   |  |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The current Schedule is saved as described in TC-11.</li> <li>The User is on the Schedule Page.</li> </ol>   |  |
| Post-conditions      | The User has a local pdf file that contains all the data of the current Schedule.   |  |
| Trigger              | The User wants to export an already existing Schedule.  |  |
| Workflow             | <ol> <li>The User shall select the "Export" button for the active Schedule.</li> <li>The System shall create a PDF of the User's Schedule.</li> <li>The System shall automatically begin a download of the PDF to the User's browser.</li> <li>The System shall display a System prompt for further action on the created file.</li> <li>The User shall select browser specific save option.</li> <li>The User shall navigate to the directory they have saved the file in and confirm it opens.</li> </ol> |  |
| Alternate Workflow   |   |  |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User shall have a copy of their exported Schedule as a PDF that contains correct information.  |  |

| Title               | TC-14: Toggle Summer Quarters  |  |  |
|---------------------|--|--|--|
| Priority            | 3  |  |  |
| Status              | Incomplete   |  |  |
| Description         | This test case documents the display of summer Quarters through the use of a toggle button.  |  |  |
| User Goal           | The User wants to view, hide, or edit summer Quarters.   |  |  |
| Desired Outcome     | The User has the option to view and edit summer Quarters if they desire, and the ability to hide summer Quarters if they do not.   |  |  |
| Actor               | User   |  |  |
| Dependent Use Cases | TC-9 (Open Schedule)   |  |  |
| Requirements        | SR-1(Login/Create Account), SR-14(View Summer Quarters), SR-15(Hide Summer Quarters)   |  |  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User must have an active Schedule.</li> <li>The User must be on the Schedule Page.</li> </ol> |  |  |
| Post-conditions     | 1. The summer Quarter columns will be shown or hidden.   |  |  |
| Trigger             | The User wants to include summer Quarters in their planning process.   |  |  |
| Workflow            | The User shall select the "Toggle Summer Quarters" toggle. The System shall hide the summer Quarters columns in the Schedule.  |  |  |
| Alternate Workflow  | The Summer Quarters were previously hidden: 2. The System shall display the summer Quarters columns in the Schedule.   |  |  |
| Expected Outcome    | The test passes when  Main Workflow:  1. The Schedule no longer displays summer Quarters if the toggle is off, and does display them if the toggle is on.                          |  |  |

| Title                | TC-15: Recommend Schedule  |  |  |
|----------------------|--|--|--|
| Priority             | 1  |  |  |
| Status               | Incomplete   |  |  |
| Description          | This test case documents the process through which the System recommends a Quarter to the User based off of 'maximum Course loads', 'minimum Course loads', and 'average difficulty across Quarters'.  |  |  |
| User Goal            | The User wants to see an example of a suggested full academic plan as a starting point for seeking suggestions.  |  |  |
| Desired Outcome      | The User's Account has a new Schedule associated with it that contains an instance of the recommended Schedule using the given criteria focus.   |  |  |
| Actor                | User   |  |  |
| Dependent Test Cases | (TC-4) Edit Settings, (TC-8) Create Schedule, (TC-11) Save Schedule  |  |  |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-13(Generate Recommended Schedule), SR-18(Create Quarter), SR-21(Add Course to Quarter), SR-23(Recommend Quarter)   |  |  |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The tester has input their major/minor information in the Settings section.</li> <li>The tester has marked their currently completed Courses.</li> <li>The tester is on the Schedule Page.</li> </ol>                   |  |  |
| Post-conditions      | A new Schedule is added to the User's Account based on the recommended Schedule.   |  |  |
| Trigger              | The User wants to see a Schedule recommended by the System for the Schedule.   |  |  |
| Workflow             | <ol> <li>The User shall select "Construct Suggested Schedule" option.</li> <li>The System shall display selection criteria.</li> <li>The User shall select "maximum Course loads".</li> <li>The System shall fill out the remainder of the User's Schedule based on the suggestion algorithm.</li> </ol> |  |  |
| Alternate Workflow   |  |  |  |
| Expected Outcome     | The test passes when  1. The User is on the Schedule Page.  2. The recommended Schedule is present on the screen.  |  |  |

| Title               | TC-16: Paste Quarter(s) to Schedule   |  |  |
|---------------------|---|--|--|
| Priority            | 3   |  |  |
| Status              | Incomplete  |  |  |
| Description         | This test case outlines the process through which a User can paste an existing Quarter into another Schedule.   |  |  |
| User Goal           | The User wants to paste an existing Quarter into a Schedule.  |  |  |
| Desired Outcome     | A Quarter is copied into the current Schedule.  |  |  |
| Actor               | User  |  |  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule), TC-18(Create New Quarter)   |  |  |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), SR-10(Save Schedule), SR-18(Create Quarter), SR-21(Add Course to Quarter)  |  |  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Quarter Page.</li> </ol>  |  |  |
| Post-conditions     | 1. The Quarter is copied into the current Schedule.   |  |  |
| Trigger             | The User wants to paste an existing Quarter into a Schedule.  |  |  |
| Workflow            | <ol> <li>The User shall select the "Paste Quarter" button.</li> <li>The System shall display a list of all the User's Schedules.</li> <li>The User shall select a Schedule that contains the Quarter that they want to copy.</li> <li>The System shall display a list of Quarters within the selected Schedule in a pop-up box.</li> <li>The User shall select on the Quarter that they want to copy.</li> <li>The System shall close the pop-up box.</li> <li>The System shall copy the selected Quarter into the currently open Quarter.</li> </ol> |  |  |
| Alternate Workflow  | The destination Quarter is not empty: 7. The System shall exit to the view Quarter Page. 8. The System shall display a message stating that the copy was unsuccessful because the destination Quarter is not empty.   |  |  |
| Expected Outcome    | The test passes when  Main Workflow:  1. There are two Schedules with the same information for a selected Quarter under the Account.  Alternate Workflow:  1. The selected Quarter in workflow step 3 is not duplicated into the current Schedule.  |  |  |

| Title               | TC-17: View Schedule Details   |  |  |
|---------------------|--|--|--|
| Priority            | 2  |  |  |
| Status              | Incomplete   |  |  |
| Description         | This test case details the process through which a User views a dashboard with the number of units, expected grades, and graduation date for a specific Schedule.  |  |  |
| User Goal           | The User wants to visualize useful information about planned Courses and Quarters within a given Schedule.   |  |  |
| Desired Outcome     | The User is presented with the number of units, expected grades, and expected graduation date from the chosen Schedule.  |  |  |
| Actor               | User   |  |  |
| Dependent Use Cases | TC-1(Login to Account), TC-8(Create Schedule), TC-9(Open Schedule)   |  |  |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule),   |  |  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the view Schedule Page.</li> </ol>   |  |  |
| Post-conditions     | The System shall display number of units, expected grades, and expected graduation date to the User about the Schedule.  |  |  |
| Trigger             | The User wants to see information about their Schedules, Courses, or Quarters.   |  |  |
| Workflow            | <ol> <li>The User shall select the "Details" button.</li> <li>The System shall display a pop up box with the following information.         <ul> <li>a. Average number of units / Quarter.</li> <li>b. Graduation date.</li> </ul> </li> </ol> |  |  |
| Alternate Workflow  |  |  |  |
| Expected Outcome    | The test passes when:  1. The details for a chosen Schedule can be seen on the view Schedule Page  |  |  |

# **Quarter Handling**

| Title               | TC-18: Create New Quarter   |
|---------------------|---|
| Priority            | 1   |
| Status              | Complete  |
| Description         | This test case details the process through which the User can add a Quarter to the end of a specific Schedule.                              |
| User Goal           | The User wants to create a new Quarter at the end of an open Schedule.  |
| Desired Outcome     | The open Schedule now has a new empty Quarter at the end of it.   |
| Actor               | User  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-8 (Create Schedule)  |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), Sr-18(Create Quarter)  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the view Schedule Page.</li> </ol>          |
| Post-conditions     | 1. A new Quarter is added to the end of the Schedule.   |
| Trigger             | The User wants to create a new Quarter for a Schedule.  |
| Workflow            | <ol> <li>The User shall select the "+" button.</li> <li>The System shall display a new empty Quarter at the end of the Schedule.</li> </ol> |
| Alternate Workflow  |   |
| Expected Outcome    | The test passes when  1. The currently open Schedule ends with an empty Quarter.  |

| Title               | TC-19: Clear Quarter   |
|---------------------|--|
| Priority            | 2  |
| Status              | Incomplete   |
| Description         | This test case describes the process through which the User removes all Courses from a Quarter.  |
| User Goal           | The User wishes to remove all Courses from the specific Quarter.   |
| Desired Outcome     | The Quarter no longer has any Courses associated with it.  |
| Actor               | User   |
| Dependent Use Cases | TC-1(Login/Create Account), TC-9 (Open Schedule), TC-18(Create New Quarter), TC-20(Add Course(s) to Quarter)   |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), SR-18(Create Quarter), SR-19(Clear Quarter), SR-22 (Remove Course from Quarter)   |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the "Test Schedule" Schedule Page as described in TC-9</li> </ol>  |
| Post-conditions     | 1. The System no longer associates any Courses to the specified Quarter.   |
| Trigger             | The User wants to clear a Quarter of any Courses that may be on it.  |
| Workflow            | <ol> <li>The User shall select the chronologically first Quarter displayed in the open Schedule.</li> <li>The System shall render the Quarter view with Courses "CSE 110" and "CSE 101".</li> <li>The User shall select the "Clear Quarter" button.</li> <li>The System shall display a pop-up window with the buttons "Confirm" and "Cancel", informing the User that clearing the Quarter will remove all Courses in it.</li> <li>The User shall select the "Confirm" button.</li> <li>The System shall remove all Courses from the selected Quarter in the Schedule.</li> </ol> |
| Alternate Workflow  | <ul><li>The User shall select the "Cancel" button:</li><li>5. The System shall close the pop up window and return to the Quarter view.</li></ul>   |
| Expected Outcome    | The test passes when  Primary Workflow:  1. The view Quarter Page no longer shows any Courses.  Alternate Workflow:  1. The view Quarter Page is shown with Courses "CSE 110", and "CSE 101".  |

| Title               | TC-20: Add Course to Quarter  |
|---------------------|---|
| Priority            | 1   |
| Status              | Incomplete  |
| Description         | This test case details the process through which the User can add desired Courses to the selected Quarter.  |
| User Goal           | The User wants to add a Course to a Quarter.  |
| Desired Outcome     | The System now associates the selected Course(s) to the Quarter selected by the User.   |
| Actor               | User  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-8 (Create Schedule), TC-18(Create Quarter)   |
| Requirements        | SR-1(Login/Create Account), SR-9(Create Schedule), SR-18(Create Quarter), SR-21(Add Course to Quarter)  |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Schedule Page for "Test Schedule" as described in TC-9.</li> </ol>  |
| Post-conditions     | <ol> <li>The System now associates the selected Courses with the User's Quarter.</li> <li>The System shall update the Schedule according to new Course addition(s).</li> </ol>  |
| Trigger             | The User wishes to add a Course to the selected Quarter.  |
| Workflow            | <ol> <li>The User shall select the title of the first Quarter of the displayed Schedule.</li> <li>The User shall select the text form at the top of the Course list search bar at the top of the search bar.</li> <li>The User shall enter "CSE 15L" into the search bar.</li> <li>The User shall press 'Enter' or select the magnifying glass icon.</li> <li>The System shall render only the Course "CSE 15L" with "2" units beneath the search bar.</li> <li>The User shall select the Course entry labeled "CSE 15L".</li> <li>The User shall select the third Course down on the Quarter view, the Course stating "-" as its name.</li> <li>The System shall display "CSE 15L" as the Course name and "2" for the units in the selected Course in the Quarter view.</li> </ol> |
| Alternate Workflow  |   |
| Expected Outcome    | The test passes when  1. The Quarter view displays these Courses, in this order, "CSE 110", "CSE 101", "CSE 15L", with 4, 4, and 2 units. The remaining Courses are named "-".  |

| Title                | TC-21: Remove Course(s) from Quarter  |
|----------------------|---|
| Priority             | 1   |
| Status               | Incomplete  |
| Description          | This test case details the process through which the User removes individual Courses from the selected Quarter.   |
| User Goal            | To remove a Course or multiple Courses from their selected Quarter.   |
| Desired Outcome      | The User's Quarter no longer has the removed Courses associated with it.  |
| Actor                | User  |
| Dependent Test Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule), TC-20(Add Course(s) to Quarter)   |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-18(Create Quarter), SR-21(Add Course to Quarter), SR-22(Remove Course from Quarter)   |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User has opened a Schedule.</li> <li>The User is on the view Schedule Page.</li> <li>The Schedule contains at least 1 Course.</li> </ol> |
| Post-conditions      | The removed Course(s) are no longer included in the User's selected<br>Quarter.   |
| Trigger              | The User wants to remove Courses.   |
| Workflow             | <ol> <li>The User shall select the trash icon next to the "CSE 110" Course.</li> <li>The System shall remove the selected Course from the Schedule.</li> </ol>  |
| Alternate Workflow   |   |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User is on the Schedule view.  2. The deleted Course is no longer present.   |

| Title                | TC-22: Recommend Quarter  |
|----------------------|---|
| Priority             | 1   |
| Status               | Incomplete  |
| Description          | This test case will be able to generate a recommended Quarter based on the list of Courses the User has left to graduate.   |
| User Goal            | The User wants to create a recommended Quarter for a Schedule.  |
| Desired Outcome      | A new Quarter will be generated in the opened Schedule containing a list of recommended Courses for the User to take.   |
| Actor                | User  |
| Dependent Test Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule)  |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-18(Create Quarter), SR-21(Add Course to Quarter), SR-23(Recommend Quarter),   |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User's current major, minor, college and past Courses are entered into their Account settings.</li> <li>The User is on the Schedule view Page.</li> <li>The User has Courses left to take that are not planned and an empty Quarter.</li> </ol>  |
| Post-conditions      | The empty Quarter is filled with Courses recommended by the System.   |
| Trigger              | The User wants a Quarter generated for their Schedule.  |
| Workflow             | <ol> <li>The User shall select the "Recommended" Schedule from the side task bar.</li> <li>The User shall select the "Fall 2018" Quarter by selecting the Quarter name.</li> <li>The System shall display a popup menu of Courses for that specific Quarter.</li> <li>The User shall see an empty Course list.</li> <li>The User shall select the "Recommend Courses" button.</li> <li>The System shall fill the Quarter with the Courses: CSE 141, CSE 141L, CSE 120, CSE 150.</li> </ol>                      |
| Alternate Workflow   | <ol> <li>The open Quarter is not empty:         <ol> <li>The User shall select the "non-empty recommender" Schedule from the side task bar</li> <li>The User shall select the Fall 2018 Quarter by clicking on the Quarter name</li> <li>The User shall see the Course CSE 120 in the Course list</li> <li>The User shall select "recommend Courses"</li> </ol> </li> <li>The System shall display a message notifying the User the action could not be completed because the Quarter was not empty.</li> </ol> |

## Expected Outcome

## The test passes when...

## Main Workflow:

- 1. The User shall be on the Quarter view of Fall 2018
- 2. The User shall have their selected Quarter prefilled with Courses

## **Alternate Workflow**

1. The System shall display a message notifying the User that the action could not be completed

| Title                | TC-23: View Quarter Overview   |
|----------------------|--|
| Priority             | 3  |
| Status               | Incomplete   |
| Description          | This test case details the process through which the User is able to view a high level summary of a specific Quarter such as class descriptions and hours per week.  |
| User Goal            | The User wants to view relevant information about a single planned Quarter.  |
| Desired Outcome      | The System has displayed to the User the total units and hours per week for a specific Quarter.  |
| Actor                | User   |
| Dependent Test Cases | TC-1(Login/Create Account), TC-8(Create Schedule), TC-9(Open Schedule), TC-18(Create New Quarter)  |
| Requirements         | SR-1(Login/Create Account), SR-9(Create Schedule), SR-18(Create Quarter), SR-24(View Course Description)   |
| Pre-conditions       | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the view Quarter Page.</li> </ol>  |
| Post-conditions      | The Page renders the hours per week and total units.   |
| Trigger              | The User wants to see more in depth statistics about the current Quarter.  |
| Workflow             | <ol> <li>The User shall select the "Overview" button.</li> <li>The System shall display a prompt with the information         <ul> <li>a. Hours per week: 30</li> </ul> </li> <li>The User shall select some element outside the prompt being displayed.</li> <li>The System shall remove the prompt from the screen.</li> </ol> |
| Alternate Workflow   |  |
| Expected Outcome     | The test passes when  Main Workflow:  1. The User can see the expected hours per week.  2. The User can successfully remove the prompt.  |

# **Course Handling**

| Course Handing      |   |
|---------------------|---|
| Title               | TC-24: Mark Course as Completed   |
| Priority            | 1   |
| Status              | Incomplete  |
| Description         | This test case documents the process through which the User marks a Course as complete in their Account.  |
| User Goal           | The User wants to mark a Course as Complete for their Account.  |
| Desired Outcome     | The System now stores the Course as a Complete Course for the current Account.  |
| Actor               | User  |
| Dependent Use Cases | TC-1(Login/Create Account), TC-6 (View Academic History)  |
| Requirements        | SR-1(Login/Create Account), SR-3(Edit Settings), SR-7 (Mark Course as Complete)   |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the View Academic History Page.</li> </ol>  |
| Post-conditions     | The System recognizes the selected Course as Complete for the Account.  |
| Trigger             | The User sees a Course they have already taken, and wishes to mark it as complete.  |
| Workflow            | <ol> <li>The User shall select a Course "CSE 110" from the Course list displayed, with the given filters on the list.</li> <li>The User shall select the "Complete" header.</li> <li>The System shall add "CSE 110" to the set of completed Courses for the logged in Account.</li> <li>The User shall see a checkmark next to the Course they marked completed.</li> </ol>   |
| Alternate Workflow  | The User has incomplete prerequisites for the selected Course:  4. The System shall inform the User that there are prerequisites for "CSE 110" which are not completed.  5. The System shall display a prompt asking the User whether to mark the pre-requisites as complete.  6. The User shall select "yes".  7. The System shall mark these Courses as complete for the User's Account.  8. The User shall see all prerequisites to "CSE 110" marked complete. |

|                  | 9. The System will return to step 3 of the workflow.  |
|------------------|---|
|                  | The User selects no: 7. The System will return to step 3 of the alternate workflow.   |
| Expected Outcome | The test passes when  Main Workflow:  1. The User shall be on the Academic History Page.  2. The Course "CSE 110" shall be marked Complete.                 |
|                  | Alternate Workflow:  1. The User shall be on the Course completed Page.  2. The Course "CSE 110" and all its Course prerequisites shall be marked Complete. |

| Title               | TC-25: Mark Course as Incomplete   |
|---------------------|--|
| Priority            | 1  |
| Status              | Incomplete   |
| Description         | This test case describes the process in which the User marks a Course as Incomplete.   |
| User Goal           | The User wants to mark a Complete Course as Incomplete for their Account.  |
| Desired Outcome     | The System no longer stores the Course as a Complete Course for the User's Account.  |
| Actor               | User   |
| Dependent Use Cases | TC-1(Login/Create Account), TC-6 (View Academic History)   |
| Requirements        | SR-1(Login/Create Account), SR-3(Edit Settings), SR-7 (Mark Course as Complete), SR-8(Mark Course as Incomplete)   |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Academic History Page.</li> <li>The User has a Course marked Complete.</li> </ol>  |
| Post-conditions     | The System does not recognize the Course as Complete.  |
| Trigger             | The User sees a Course they wish to mark Incomplete.   |
| Workflow            | <ol> <li>The User shall select the red "X" next to "CSE 110" from the list of Completed Courses displayed.</li> <li>The System shall remove "CSE 110" from the set of Complete Courses.</li> <li>The System shall display a prompt informing the User that this is a prerequisite for other Courses.</li> <li>The User clicks "Continue" button.</li> <li>"CSE 110" and its post-requisites are removed from the Course completed list.</li> </ol> |
| Alternate Workflow  | The Course marked Incomplete is a prerequisite for other Courses the User has that are marked Complete: 4. The User clicks "Cancel" button. 5. 'CSE 110' and its post-requisites remain on the Course completed list.  |
| Expected Outcome    | The test passes when  Main Workflow:  1. The User shall be on the Course completed Page.  2. The Course "CSE 110" shall not be present on the list.  Alternate Workflow:  1. The User shall be on the Course completed Page.  2. The Course "CSE 110" and Courses that require it as a prerequisite shall not be present on the list.  |
|                     | be present on the list.  |

| Title               | TC-26: Course Description  |
|---------------------|--|
| Priority            | 2  |
| Status              | Incomplete   |
| Description         | This test case describes the process through which the User can view information about a specific Course such units, prerequisites, description, and expected hours per week.  |
| User Goal           | The User wants to view information about a Course.   |
| Desired Outcome     | The User can view all relevant information described above about a specific Course.  |
| Actor               | User   |
| Dependent Use Cases | TC-20(Add Course(s) to Quarter)  |
| Requirements        | SR-1(Login/Create Account), SR-24(View Course Description)   |
| Pre-conditions      | <ol> <li>The User is logged into the test Account as described in TC-1.</li> <li>The User is on the Quarter View Page.</li> </ol>  |
| Post-conditions     | The System displays the Course information such as units and hours per week.   |
| Trigger             | The User wants to view general information about a Course.   |
| Main Workflow       | <ol> <li>The User shall select the "Search for" field of the Searchbar.</li> <li>The User shall search for 'CSE 110'.</li> <li>The User shall select 'CSE 110'.</li> <li>The User shall hover over the (?) on the top left of the Quarter View Page.</li> <li>The System shall display a pop-up to the User with the units, average hours per week, description, and prerequisites for the specific Course.</li> </ol> |
| Alternate Workflow  |  |
| Expected Outcome    | The test passes when  Main Workflow:  1. The User is on the Quarter View Page. 2. There should be a Course pop-up window visible.  |



# Class Constructor User Story Acceptance Tests

#### **Team Class Constructor**

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# **Glossary of Terms**

| Term              | Definition  |
|-------------------|---|
| Quarter           | A collection of Courses connected by being taken during the same period of time.  |
| Schedule          | A collection of one or more Quarters that represents a linear chronological progression the User intends to take.   |
| User              | The end User of the system (User, counselor, other) who wants to be able to plan their Schedule or use other utilities made available through the application.                              |
| Export            | To download in some easily usable and readable format (pdf)   |
| Login Information | Email and password pair verifying the User's account  |
| Developer         | One of the team members of Class Constructor  |
| Scraper           | The program designed to gather data from the website to be used by the application  |
| Course            | An area of academic study classified in the Course Catalog as approved by UCSD. Generally identified by the class listing with the catalog, such as CSE 110.                                |
| Account           | The collection of all personal, Account, and schedule information associated with a specific linked Google Account. The Account contains both User settings and general stored information. |

# **User Story Acceptance Tests**

| TC-1.                   | Log In  |
|-------------------------|---|
| Description             | As a User, I want to be able to log into the System using my Google credentials, so I can view or interact with my Schedules without having to create an Account.   |
| Priority                | 1   |
| Status                  | Incomplete  |
| Test Workflow           | <ol> <li>The tester shall select the "Login" button on the login screen.</li> <li>The tester shall input their Google credentials as prompted by Google.</li> <li>The tester shall select the "Next" button.</li> </ol> |
| <b>Expected Results</b> | The tester shall be redirected to their Home Screen   |
| <b>Actual Results</b>   |   |

| TC-2.                   | Export Schedules   |
|-------------------------|--|
| Description             | As a User, I want to be able to export my planned schedules, so that I can discuss them in person during academic planning meetings.                     |
| Priority                | 1  |
| Status                  | Incomplete   |
| Test Workflow           | <ol> <li>The tester shall select the "Export" button for an active schedule</li> <li>The system shall download a PDF to the tester's computer</li> </ol> |
| <b>Expected Results</b> | A PDF will be downloaded to the tester's system with contents matching the selected schedule   |

| TC-3.         | Course Offering History   |
|---------------|---|
| Description   | As a User, I want to see which quarters my courses are usually offered (Fall, Winter, and/or Spring), so that I can plan to take the courses when they're offered.  |
| Priority      | 1   |
| Status        | Incomplete  |
| Test Workflow | <ol> <li>The tester shall navigate to one of their schedules.</li> <li>The tester shall search for the course they would like to know more about.</li> <li>The tester shall select the course in the search results.</li> </ol> |

The course offering history is visible in the course description at the bottom of the screen

#### **Actual Results**

**Expected Results** 

| TC-4.                   | Import Academic History (External)  |
|-------------------------|---|
| Description             | As a User, I want import previous classes that I took via CSV or degree audit page, so that I can quickly have a schedule.  |
| Priority                | 1   |
| Status                  | Incomplete  |
| Test Workflow           | <ol> <li>The tester shall navigate to the 'Academic History' page.</li> <li>The tester shall select the 'Import Academic History' button.</li> <li>The tester shall follow the instructions to download their degree audit.</li> <li>The tester shall upload their degree audit.</li> <li>The tester shall resolve any prerequisite inconsistencies that the system displays</li> </ol> |
| <b>Expected Results</b> | The tester's 'Academic History' page shall be populated with the classes marked as 'Complete', 'In Progress', and 'Incomplete' as specified by the degree audit they uploaded.  |

| TC-5.                   | Refresh Database   |
|-------------------------|--|
| Description             | As a developer, I want the ability to manually call scraper to update database, so that the site can be future proof and shown in interviews.  |
| Priority                | 1  |
| Status                  | Incomplete   |
| Test Workflow           | <ol> <li>The developer shall go to<br/>http://class-construction-env.k7s3ksa3nd.us-east-1.elasticbeanstal<br/>k.com/api/classes</li> <li>The developer shall save the page as "classes.json".</li> <li>The developer shall run the python script "databasepopulator.py"<br/>with the path to "classes.json" as a command line argument.</li> </ol> |
| <b>Expected Results</b> | The database shall be populated with the most recent class listing as was collected in the "classes.json" files.   |
| Actual Results          |  |

## TC-6. View Quarter Overview

|                         | •   |
|-------------------------|---|
| Description             | As a User, I want to be able to see the estimated hours per week for a chosen quarter, so that I have an idea of course load requirements.  |
| Priority                | 1   |
| Status                  | Incomplete  |
| Test Workflow           | <ol> <li>The tester shall navigate to the "Schedule" page.</li> <li>The tester shall click the "Overview" button of the "SP19" quarter.</li> <li>The system shall display a prompt with the information         <ul> <li>a. Expected GPA: 3.0</li> <li>b. Hours per week: 30</li> </ul> </li> <li>The tester shall select some element outside than the prompt displayed or click the close button.</li> <li>The system shall remove the prompt from the screen.</li> </ol> |
| <b>Expected Results</b> | The system shall display a prompt with the information:  a. Expected GPA: 3.0  b. Hours per week: 30  |

| TC-7.                           | Mark Course as Completed  |  |
|---------------------------------|---|--|
| Description                     | As a User, I want to be able to mark a course as completed, so that prerequisite clearance is easy and I can see what classes are available to me.  |  |
| Priority                        | 1   |  |
| Status                          | Incomplete  |  |
| Test Workflow                   | <ol> <li>The tester shall navigate to the "Academic History" page.</li> <li>The tester shall select the class "CSE 110" from the class list displayed, with the given filters on the list.</li> <li>The tester shall select the "Mark Complete" option.</li> <li>The system shall add "CSE 110" to the set of completed classes for the logged in account.</li> </ol> |  |
| <b>Expected Results</b>         | The course "CSE 110" shall be marked completed, indicated by a checkmark next to the course title.  |  |
| <b>Actual Results</b>           |   |  |
| TC-8.                           | Create Schedule   |  |
| Description                     | As a User, I want a visualization of the prerequisites for a class, so that I can easily understand what I still need to take.  |  |
| Priority                        | 1   |  |
|                                 |   |  |
| Status                          | Incomplete  |  |
| Status Test Workflow            | <ol> <li>The tester shall click the "New Schedule" button in the sidebar.</li> <li>The new schedule shall be titled "New Schedule."</li> <li>The tester shall click on the title of the newly-created schedule and type in "Test Schedule."</li> <li>The new schedule shall now be titled "New Schedule."</li> </ol>  |  |
|                                 | <ol> <li>The tester shall click the "New Schedule" button in the sidebar.</li> <li>The new schedule shall be titled "New Schedule."</li> <li>The tester shall click on the title of the newly-created schedule and type in "Test Schedule."</li> </ol>  |  |
| Test Workflow                   | <ol> <li>The tester shall click the "New Schedule" button in the sidebar.</li> <li>The new schedule shall be titled "New Schedule."</li> <li>The tester shall click on the title of the newly-created schedule and type in "Test Schedule."</li> <li>The new schedule shall now be titled "New Schedule."</li> </ol>  |  |
| Test Workflow  Expected Results | <ol> <li>The tester shall click the "New Schedule" button in the sidebar.</li> <li>The new schedule shall be titled "New Schedule."</li> <li>The tester shall click on the title of the newly-created schedule and type in "Test Schedule."</li> <li>The new schedule shall now be titled "New Schedule."</li> </ol>  |  |

| Priority   | , |
|------------|---|
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| Status                  | Incomplete  |
|-------------------------|---|
| Test Workflow           | <ol> <li>The tester shall navigate to the Academic History page.</li> <li>The tester shall look under the tab for Incomplete courses.</li> <li>The tester shall see a list of classes that are required for their major/college.</li> </ol> |
| <b>Expected Results</b> | The list of classes shown on screen as Incomplete match the requirements for the testers major.   |

# TC-10. Schedule Suggestion

| Description             | As a User, I want the ability to have a schedule suggested for me that includes all my required classes, so that I have a starting point for planning my own variations.  |
|-------------------------|---|
| Priority                | 1   |
| Status                  | Incomplete  |
| Test Workflow           | <ol> <li>The tester shall be in a Schedule view page.</li> <li>The tester shall select the "Suggest" button.</li> <li>The system shall fill in the empty spots on the testers schedule based on graduation requirements.</li> <li>The schedule shown on screen will now be filled in with the suggested courses.</li> </ol> |
| <b>Expected Results</b> | The schedule is filled out with a suggested path to graduation based on the tester's college and major.   |

#### **Actual Results**

### TC-11. Schedule Correction

| Description   | As a User, I want my potential schedules to be checked for errors, conflicts, or inaccurate course loads, so that I can avoid having to deal with the errors myself.  |
|---------------|---|
| Priority      | 2   |
| Status        | Incomplete  |
| Test Workflow | <ol> <li>The tester fills out a Schedule.</li> <li>The System shall highlight Quarters in which there are class conflicts or an unavailable amount of classes.</li> <li>The tester shall fix these issues.</li> </ol> |

4. The System shall return to the normal Schedule view.

### **Actual Results**

| TC-12.                  | Links Page   |  |
|-------------------------|--|--|
| Description             | As a User, I want links to other websites I should visit as I plan my Courses, so that I can use Class Constructor as my Course planning "hub".  |  |
| Priority                | 1  |  |
| Status                  | Incomplete   |  |
| Test Workflow           | <ol> <li>The Tester shall select the button in the sidebar labeled "Links"</li> <li>The Tester shall select any of the links</li> <li>The Tester shall be redirected to the page indicated by the link name</li> </ol> |  |
| <b>Expected Results</b> | The Tester shall see a page of helpful links. The Tester shall be able to click on the links and be navigated to the appropriate page indicated by the text.   |  |
| <b>Actual Results</b>   |  |  |

| TC-13.                  | Cross Platform   |  |
|-------------------------|--|--|
| Description             | As a User, I want this to be compatible with all my non-mobile devices, so that I can check my schedule on a variety of devices.   |  |
| Priority                | 2  |  |
| Status                  | Incomplete   |  |
| Test Workflow           | <ol> <li>The Tester shall access the website with a non-desktop device.</li> <li>The Tester shall navigate to all pages normally on any device</li> <li>The Tester shall see that all the same information is available across different devices.</li> </ol> |  |
| <b>Expected Results</b> | The Tester shall be able to use the full functionality of the site on any device with the correct information displayed.   |  |

| TC-14.                  | Cape   |  |
|-------------------------|--|--|
| Description             | As a User, I want to be able to view CAPE stats, and course descriptions for planned courses, so that I have a better understanding of what the course might be like.  |  |
| Priority                | 2  |  |
| Status                  | Incomplete   |  |
| Test Workflow           | <ol> <li>The tester shall select "Add a course" when viewing a schedule.</li> <li>The tester shall input a course.</li> <li>The tester shall select "More information" before adding the course</li> <li>The system shall present a pop-up window displaying additional information about the course based on CAPE statistics</li> </ol> |  |
| <b>Expected Results</b> | Additional information for a course is presented to the user through a pop-up window in the application.   |  |

| TC-15.                  | View Course Details   |  |
|-------------------------|---|--|
| Description             | As a User, I want to be able to add a course to a specific quarter within a schedule, so that I can plan which courses to take and when to take them.   |  |
| Priority                | 2   |  |
| Status                  | Incomplete  |  |
| Test Workflow           | <ol> <li>The tester shall select "Add a course" when viewing a schedule.</li> <li>The tester shall input a course.</li> <li>The tester shall select "More information" before adding the course</li> <li>The system shall present a pop-up window displaying additional information about the course</li> </ol> |  |
| <b>Expected Results</b> | Additional information for a course is presented to the user through a pop-up window in the application.  |  |

| TC-16.                  | Name Schedule   |  |
|-------------------------|---|--|
| Description             | As a User, I want to be able to name schedules, so that I can identify my different schedules correctly.  |  |
| Priority                | 2   |  |
| Status                  | Incomplete  |  |
| Test Workflow           | <ol> <li>The tester is on the schedule page</li> <li>The tester selects a schedule</li> <li>The tester selects the name of the schedule to edit it</li> <li>The tester input text different than the original name of the schedule</li> </ol> |  |
| <b>Expected Results</b> | The schedule is renamed to the text the tester types for the name and this is correctly reflected on the schedules page   |  |

# TC-17. View Units for Quarter

| Description             | As a User, I want to be able to see the amount of units I will take for each quarter or for a specific quarter, so that I can estimate how tough an upcoming quarter will be.                 |
|-------------------------|---|
| Priority                | 1   |
| Status                  | Complete  |
| Test Workflow           | <ol> <li>The tester shall open a schedule containing at least one course.</li> <li>The system shall render the schedule with the number of units / quarter shown for each quarter.</li> </ol> |
| <b>Expected Results</b> | The system displays the number of units for each quarter.   |
|                         |   |

# **Actual Results**

**Actual Results** 

## TC-18. Report Inaccurate Information

| Priority                | that the developers are aware of the problem and can fix it.  1   |
|-------------------------|---|
| Status                  | Incomplete  |
| Test Workflow           | <ol> <li>The tester shall login to the system with their credentials.</li> <li>The tester shall select the "Report Information" tab on the sidebar.</li> <li>The tester will input a short description of their report in the prompt which appears.</li> <li>The tester will select "Submit".</li> <li>The tester will be shown a prompt telling them their report has been noted.</li> </ol> |
| <b>Expected Results</b> | The user is notified that their report has been recorded.   |

| TC-19.                  | Remember Login Information across Sessions  |  |
|-------------------------|---|--|
| Description             | As a User, I want my login information to be remembered, so that I have an ease of access when accessing the site.  |  |
| Priority                | 1   |  |
| Status                  | Incomplete  |  |
| Test Workflow           | <ol> <li>The tester shall login to the system with their credentials.</li> <li>The tester shall create a new schedule, naming it with some unique name.</li> <li>The tester shall logout by selecting the logout button on the sidebar.</li> <li>The tester shall type "www.classconstructor.com" into the address field of their browser.</li> </ol> |  |
| <b>Expected Results</b> | The tester shall be redirected automatically to the welcome page, with all expected results for the login user story acceptance test (TC-1) being satisfied.  |  |

| TC-20.      | Mark a Course as In Progress  |
|-------------|---|
| Description | As a User, I want to be able to mark a Course as 'In Progress' so the System can track the Courses that I'm currently taking. |

| Priority   | , |
|------------|---|
| LI IOI ICA | 1 |

| Status                  | Incomplete   |
|-------------------------|--|
| Test Workflow           | <ol> <li>The tester shall login to the System with their credentials.</li> <li>The tester shall select the "Academic History" tab of the navigation side bar.</li> <li>The tester shall select a Course from the course listing on the right of the screen.</li> <li>The tester shall select the "Course History" header to add the selected Course to their Course listing.</li> <li>The tester shall select the "I.P." button on the side of the entry of the Course in the user's Course history.</li> <li>The system shall change the background of the Course entry to yellow.</li> </ol> |
| <b>Expected Results</b> | The System shall set the color of the Course to yellow to mark it as in progress.  |

| TC-21.                  | Recommend Quarter  |
|-------------------------|--|
| Description             | As a User, I want to have courses recommended to me so that I can easily identify necessary courses to take.   |
| Priority                | 1  |
| Status                  | Incomplete   |
| Test Workflow           | <ol> <li>The User shall log in with their credentials</li> <li>The User shall select a Schedule</li> <li>The User shall select a Quarter</li> <li>The User shall select "recommend quarter"</li> <li>The System shall populate a Quarter with Courses</li> </ol> |
| <b>Expected Results</b> | The System shall populate a Quarter with Courses   |

| TC-22.      | View Quarter Overview  |
|-------------|--|
| Description | As a User I want to be able to view detailed information about a selected Quarter such as total number of units and expected number of hours per |

|                         | week.  |
|-------------------------|--|
| Priority                | 1  |
| Status                  | Incomplete   |
| Test Workflow           | <ol> <li>The User shall log in with their credentials</li> <li>The User shall select a Schedule from the Schedule task-bar</li> <li>The User shall select a Quarter</li> <li>The User shall select the "overview" button</li> <li>The System shall display an overview of the expected hours per week the user is going to spend on their classes, and the total number of units.</li> </ol> |
| <b>Expected Results</b> | The System shall display a high-level summary of their a specific Quarter  |