

1. Test Driven Development

Test cases will be provided in the form of a table as follows:

Test ID	TC-001
Category	Verify Login
Requirements Coverage	UC-01-Login-Invalid
Input Data	Username = user, Password = 12345
Procedure	<i>1. Incorrect username and/or password is entered 2. User clicks "submit".</i>
Expected Outcome	The login screen should terminate.
Notes	Usernames and passwords are not case sensitive.

Test ID	TC-002
Category	Verify Login
Requirements Coverage	UC-01-Login-Invalid
Input Data	Username = user, Password = 1234
Procedure	<i>1. Incorrect username and/or password is entered 2. User clicks "submit".</i>
Expected Outcome	The login screen should close, and the main UI should appear.
Notes	Usernames and passwords are not case sensitive.

Test ID	TC-003
Category	Verify Analysis Selection
Requirements Coverage	UC-02-Analysis-Selection-Different
Input Data	Analysis = Forest Analysis, PreviousSelection = education analysis
Procedure	<i>1. User clicks on analysis menu. 2. User selects a different analysis than previously selected.</i>
Expected Outcome	The selected analysis is displayed on the UI and all viewers are cleared from display area.

Notes	Selecting an analysis on first login (no viewers existing) essentially follows the same procedure.
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Test ID	TC-004
Category	Verify Analysis Selection
Requirements Coverage	UC-02-Analysis-Selection-Same
Input Data	Analysis = Forest Analysis , Viewer = bar chart, Previous Selection Health Analysis
Procedure	<ol style="list-style-type: none"> 1. User clicks on analysis menu. 2. User selects same analysis
Expected Outcome	The selected analysis is displayed on the UI and viewers are kept on screen.
Notes	

Test ID	TC-005
Category	Verify Country Selection
Requirements Coverage	UC-03-Country-Selection-Invalid/Missing
Input Data	Analysis = Forest Analysis, country = Japan, Previous Selection Health Analysis
Procedure	1. User selects a country from the drop-down menu which is invalid or null (not a country).
Expected Outcome	An error/exception message is displayed that the selection is invalid.
Notes	Upon closing the error message, the user is able to attempt to select a country again. The system does not update or display the selected (invalid) country in the drop down-menu.

Test ID	TC-006
Category	Verify Country Selection
Requirements Coverage	UC-03-Country-Selection-Valid
Input Data	Country = Canada

Procedure	<i>1. User selects a country from the drop-down menu which is valid for the selected analysis.</i>
Expected Outcome	The system updates and displays the user's selection in the drop-down menu.
Notes	

Test ID	TC-007
Category	Verify Years Selection
Requirements Coverage	UC-04-Years-Selection-Valid
Input Data	StartYr = 2005, EndYr = 2000
Procedure	<i>1. User selects a start and/or end year from the drop-down menu which is invalid (i.e. The start year is sooner than the end year or either year is missing/not a year).</i>
Expected Outcome	An error/exception message is displayed that the selection is invalid.
Notes	Upon closing the error message, the user is able to select start and end years again. The system does not update or display the selected (invalid) period in the drop down-menu.

Test ID	TC-008
Category	Verify Years Selection
Requirements Coverage	UC-04-Years-Selection-Valid
Input Data	StartYr = 2000, EndYr = 2010
Procedure	<i>1. User selects a start and end year from the drop-down menu which is valid.</i>
Expected Outcome	The system updates and displays the user's selection in the drop-down menu.
Notes	

Test ID	TC-009
Category	Verify Viewer Addition
Requirements Coverage	UC-05- Compatible-New-Viewer-Added
Input Data	analysis = Forest Analysis, viewerType = pie, buttonType = +
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is compatible with the current analysis and is not being displayed. 2. User presses the add “+” button
Expected Outcome	Selected viewer is displayed on the screen after all the previously selected viewers, if any, and added to the list of displayed viewers (which will be notified upon any analysis data changes).
Notes	Upon successfully adding the viewer, the user can try adding another viewer.

Test ID	TC-010
Category	Verify Viewer Addition
Requirements Coverage	UC-05-Compatible-Existing-Viewer-Added
Input Data	analysis = Forest Analysis, viewerType = pie, buttonType = +
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is compatible with the current analysis and is already being displayed. 2. User presses the add “+” button
Expected Outcome	An error/exception message pops up telling the user that the selected viewer cannot be added as it is already being displayed.
Notes	Upon closing the error message, the user can try adding another viewer.

Test ID	TC-011
Category	Verify Viewer Addition
Requirements Coverage	UC-05-Incompatible-New-Viewer-Added
Input Data	analysis = Forest Analysis, viewerType = pie, buttonType = +
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is not compatible with the current analysis and is not being displayed. 2. User presses the add “+” button
Expected Outcome	An error/exception message pops up telling the user that the selected viewer cannot be added as it is not compatible with the currently selected analysis.
Notes	Upon closing the message, the user can try adding another viewer.

Test ID	TC-012
Category	Verify Viewer Addition
Requirements Coverage	UC-05-Incompatible-Existing-Viewer-Added
Input Data	analysis = Forest Analysis, viewerType = pie, buttonType = +
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is not compatible with the current analysis and is already being displayed. 2. User presses the add “+” button
Expected Outcome	An error/exception message pops up telling the user that the selected viewer cannot be added as it is not compatible with the currently selected analysis.
Notes	Upon closing the error message, the user can try adding another viewer.

Test ID	TC-013
Category	Verify Viewer Removal
Requirements Coverage	UC-06-Existing-Viewer-Removed
Input Data	viewerType = pie, buttonType = -
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is currently being displayed. 2. User presses the remove “-” button
Expected Outcome	Selected viewer is removed from the screen and deleted from the list of displayed viewers.
Notes	Upon successfully removing the viewer, the user can try removing another viewer.

Test ID	TC-014
Category	Verify Viewer Removal
Requirements Coverage	UC-06-Nonexisting-Viewer-Removed
Input Data	analysis = Forest Analysis , viewerType = pie , buttonType = -
Procedure	<ol style="list-style-type: none"> 1. User selects a viewer type from the drop-down list which is not being displayed. 2. User presses the remove “-” button
Expected Outcome	An error/exception message pops up telling the user that the selected viewer cannot be removed because it is not being displayed.
Notes	Upon closing the error message, the user can try adding another viewer.

Test ID	TC-015
Category	Verify Recalculate
Requirements Coverage	UC-07-Missing-Parameter-Recalculate
Input Data	recalculate
Procedure	<i>1. User clicks “recalculate”</i>
Expected Outcome	An error/exceptions message pops up telling the user that there is a missing parameter.
Notes	

Test ID	TC-016
Category	Verify Recalculate
Requirements Coverage	UC-07-Successful-Recalculate
Input Data	recalculate
Procedure	<i>1. User clicks “recalculate”</i>
Expected Outcome	The analysis results are updated/created, and any existing viewers reflect this change.
Notes	

Test ID	TC-017
Category	Verify Displayed Results
Requirements Coverage	UC-08-Display-Results
Input Data	ViewerType = BarChart, recalculate
Procedure	<i>1. User adds all possible compatible viewers to the display area 2. User clicks the recalculate button</i>

Expected Outcome	All viewers are correctly populated on screen with their corresponding analysis data. User can visually confirm that all data points are present.
Notes	Only presence of data or errors can be confirmed, and accuracy of calculations cannot be verified in this test case.

2. Group Meeting Logs

Present Group Members	Meeting Date	Issues Discussed / Resolved
Matthew, Soran, Stephan, Gina	Jan 21, 2021	Each person was assigned to do 2 Use Cases and 2 Use Case diagrams by the next meeting.
Matthew, Soran, Stephan, Gina	Jan 26, 2021	Group members went over and edited the Use Cases and Use Case diagrams together. Also worked on the Actor definitions.
Matthew, Soran, Stephan, Gina	Jan 29, 2021	Each person was assigned to come up with 3.2.1 Domain Model Class Definitions based on the Use Cases we chose.
Matthew, Soran, Stephan, Gina	Feb 3, 2021	Combined the Domain Model Class Definitions. There was a confusion as some of domain model class definitions overlap, but group members decided to put all the possible class definitions down on the tables. Also, worked on Project Backlog and Sprint Backlog together.
Matthew, Soran, Stephan, Gina	Feb 5, 2021	Worked on Gantt Chart together. Group members went through the document together.
Matthew, Soran, Stephan, Gina	Feb 10, 2021	Each person was assigned to do 2 sequence diagrams and 2 activity diagrams by the next meeting.
Matthew, Soran, Stephan, Gina	Feb 20, 2021	Group members combined and went over the sequence diagrams and activity diagrams together. Each person was assigned to complete test cases for each use case and description of sequence and activity diagrams.
Matthew, Soran, Stephan, Gina	Feb 24, 2021	Group members reviewed the feedback from the deliverable1 and edited the document.
Matthew, Soran, Stephan, Gina	Feb 27, 2021	Group members updated Gantt Chart, went through all the test cases, and edited the document.

Matthew, Soran, Stephan, Gina	March 4, 2021	Each person was assigned to do component diagram and class diagrams by the next meeting.
Matthew, Soran, Stephan, Gina	March 9, 2021	Group members discussed about component diagrams.
Matthew, Soran, Stephan, Gina	March 12, 2021	Group members went over the class diagrams together.
Matthew, Soran, Stephan, Gina	March 17, 2021	Each person was assigned to do the description for each class diagram and the design pattern.
Matthew, Soran, Stephan, Gina	March 20, 2021	Group members went over and edited the document.
Matthew, Soran, Stephan, Gina	March 24, 2021	Group members started coding their parts: <ul style="list-style-type: none"> - Soran: LoginComponent - Gina: WorldBankReader - Stephan: AnalysisComponent - Matt: SelectionModule
Matthew, Soran, Stephan, Gina	March 26, 2021	Group members met to track the progress made for their codes and discussed what to improve by the next meeting. Also planned to combine the code next meeting.
Matthew, Soran, Stephan, Gina	March 29, 2021	Group members combined the codes using Github since there was a problem accessing the group Bitbucket. After combining the codes, the compilation errors had been fixed.
Matthew, Soran, Stephan, Gina	April 1, 2021	Group members combined and tested the codes.