

Process MeNtOR 3.0
Uni-SEP

CS2212B Project
Final Report

Project Backlog	
Task	Priority
Produce Use Case Diagrams, Descriptions	-
Produce Class Diagrams, Definitions	-
Produce Sequence Diagrams	-
Produce Activity Diagrams	-
Detail Non functional requirements	-
Revise Gantt Chart, Sprint & Project Backlog	-
Detail Test Cases	-
Finalize Major Design Decisions	-
Test Code	-
Optimize and Finalize	-
Create Analysis Components	-
Implement functional viewers	-
Implement adding and removing viewers	-
Create Years Database	-
Create Countries Database	-
Create Views Database, Server	-
Create Analysis Database, Server	-
Create Login Database, Server	-

Sprint Backlog

Group Meeting Logs

In this Section you write minutes of each meeting, listing the attendance, what the topics of discussion in the meeting were, any decisions that were made, and which team members were assigned which tasks. These minutes must be submitted with the project report in each deliverable and will provide input to be used for the overall assessment of the project.

Present Group Members	Meeting Date	Issues Discussed / Resolved
All	March 30th	Delegated Edward and Chris: Design patterns: proxy, singleton, observer (viewer is observer) ValidationServer; Validation Data-Base; Validation UI; Main UI; Countries DB; Selection; ViewersDB; ViewersServer; 5 View types Joey and Rosy: Design patterns: factory method, facade, strategy, observer (analysis is subject) Computational Server; Analysis; 8 Analysis Types; Factory; DataType; Data; DataItem; Reader ; WorldBankAPI
All	April 3rd	Coding season to finish all parts
All	April 5th	Debugging
All	April 6th	Debugging
All	April 7th	Debugging

1 Test Driven Development

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

Test ID	The unique Id of the test case
Category	Which part of the system is tested (<i>e.g. evaluation of user credentials stored on file or DB</i>)
Requirements Coverage	The unique ID of the requirement tested (<i>e.g. UC1-Successful-User-Login</i>)
Initial Condition	Initial conditions required for the test case to run (<i>e.g. the system has been initiated and runs</i>)
Procedure	The list of steps required for this test case (<i>e.g.</i> <ol style="list-style-type: none"> 1. The user selects login 2. The user provides a user name 3. The user provides a password 4. The user logs-in into the system and is presented with the main UI window)
Expected Outcome	The expected outcome of the test case (<i>e.g. the login form closes, and the user is presented with the main UI window</i>)
Notes	Any other notes you may want to add for this test case, which are also reflected in the requirements specification (<i>e.g. the user should provide only alphanumeric user names and passwords without any special characters</i>)

Test ID	1.1
Category	Evaluation of login system (database and server)
Requirements Coverage	UC1-Successful-User-Login
Input Data	Username, password
Procedure	<ol style="list-style-type: none"> 1. The end user provides a user name 2. The end user provides a password 3. The end user logs in to the system and is presented with the main UI window
Expected Outcome	The login form closes and the user is presented with the main UI window
Notes	The user should provide only alphanumeric usernames and passwords without any special characters

Test ID	1.2
Category	Evaluation of login system (database and server)
Requirements Coverage	UC1-Unsuccessful-User-Login
Input Data	Incorrect Username or password
Procedure	<ol style="list-style-type: none"> 1. The end user selects login 2. The end user provides a user name 3. The end user provides a password 4. One or both of the user name and password is incorrect 5. Display an error message 6. Terminate
Expected Outcome	The system terminates.

Notes	The end user should provide only alphanumeric usernames and passwords without any special characters
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Test ID	2.1
Category	Evaluation of analysis selection
Requirements Coverage	UC2-Analysis-Selection-EmptyViewers
Input Data	Analysis choice selection,
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on dropdown menu 2. The end user selects a new, different analysis from menu 3. Analysis choice is selected 4. System will empty list of viewers
Expected Outcome	The new analysis will be selected, and viewers will be emptied in preparation for the new analysis.
Notes	

Test ID	2.2
Category	Evaluation of analysis selection
Requirements Coverage	UC2-Analysis-Selection-RetainViewers
Input Data	No change from previous analysis
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on dropdown menu 2. The end user selects an analysis from menu 3. Analysis has not been changed 4. Nothing changes within the system

Expected Outcome	There is nothing different about the system. The analysis stayed the same
Notes	

Test ID	3.1
Category	Evaluation of country selection
Requirements Coverage	UC3-Valid-Country-Selection
Input Data	Country selection
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on country dropdown menu 2. The end user selects a country from menu 3. The country is valid for analysis 4. System continues standard operations
Expected Outcome	The end user is now asked to select a beginning and end year for future analysis on the selected country
Notes	

Test ID	3.2
Category	Evaluation of country selection
Requirements Coverage	UC3-Invalidl-Country-Selection
Input Data	Invalid country selection
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on country dropdown menu 2. The end user selects a country from menu 3. The country is invalid for analysis 4. Error message is displayed notifying the end user that their country selection is invalid
Expected Outcome	The end user is now asked to reselect a new country within the drop-down menu

Notes	
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Test ID	4.1
Category	Evaluation of year range selection
Requirements Coverage	UC4-Valid-Years-Selection
Input Data	Year selection
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on years dropdown menu 2. The end user selects first year 3. The end user selects second year 4. The selected analysis is validated to make sure data is available for selected range 5. System continues standard operations
Expected Outcome	The validated year range is now selected
Notes	

Test ID	4.2
Category	Evaluation of year range selection
Requirements Coverage	UC4-Invalid-Years-Selection
Input Data	Invalid year selection
Procedure	<ol style="list-style-type: none"> 1. The end user clicks on years dropdown menu 2. The end user selects first year 3. The end user selects second year 4. The selected analysis is invalid as data is not available for selected range 5. Display error message stating that their country selection is invalid
Expected Outcome	The end user is now asked to select a different time frame
Notes	

Test ID	5.1
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Category	Evaluation of viewer selection
Requirements Coverage	UC5-Valid-Visualization-Selection
Input Data	Viewer selection, add button
Procedure	<ol style="list-style-type: none"> 1. The end user selects a viewer 2. The end user clicks “add” 3. The end user’s selection is validated 4. System continues standard operations
Expected Outcome	The selected viewer is added to the viewer list; if this is the first added viewer (i.e. the list was empty prior) the user is now able to remove viewers
Notes	

Test ID	5.2
Category	Evaluation of viewer selection
Requirements Coverage	UC5-Unsuccessful-Viewer-Selection
Input Data	Incompatible viewer selection, add button
Procedure	<ol style="list-style-type: none"> 1. The end user selects a viewer 2. The end user clicks “add” 3. The end user’s viewer selection is invalid and not compatible with selected analysis 4. Display an error message and prompt user to reselect
Expected Outcome	Viewers remain unchanged; the user is prompted to select a new visualization/viewer
Notes	

Test ID	6.1
Category	Evaluation of viewer removal

Requirements Coverage	UC6-Successful-Viewer-Removal
Input Data	viewer selection, subtract button
Procedure	<ol style="list-style-type: none"> 1. The end user selects the “remove” button from the viewer drop-down menu 2. The viewer is removed from the list of viewers 3. System continues standard operations
Expected Outcome	The main UI no longer displays the remained viewer
Notes	

Test ID	6.2
Category	Evaluation of viewer removal
Requirements Coverage	UC6-Unsuccessful-Viewer-Removal
Input Data	Incompatible viewer selection, subtract button
Procedure	<ol style="list-style-type: none"> 1. The end user selects the “remove” button from the viewer drop-down menu 2. The viewer selected to be removed is not in the list of viewers 3. End users receive an error message that their selection is not valid and to reselect
Expected Outcome	No change; the user is able to select a different viewer to remove
Notes	

Test ID	7.1
Category	Evaluation of analysis performance

Requirements Coverage	UC7-HappyPath-Analysis-Performance
Input Data	New analysis selection, recalculate button
Procedure	<ol style="list-style-type: none"> 1. The end user clicks the “recalculate” button 2. Analysis server retrieves all the specifications chosen by the user 3. Analysis server initializes retrieval of data 4. Data is retrieved and processed 5. Return result with computed data
Expected Outcome	The data required for the analysis has been retrieved and computed. The system prompts the viewers to display the results.
Notes	

Test ID	7.2
Category	Evaluation of analysis performance
Requirements Coverage	UC7-NoProcessing-Analysis-Performance
Input Data	The same analysis selection, recalculate button
Procedure	<ol style="list-style-type: none"> 1. The end user clicks the “recalculate” button 2. Analysis server retrieves all the specifications chosen by the user 3. Analysis server initializes retrieval of data 4. Data is retrieved—it does not need to be processed; no changes are made 5. Return result with computed data
Expected Outcome	The data required for the analysis has been retrieved and computed. The system prompts the viewers to display the results.
Notes	

Test ID	7.3
Category	Evaluation of analysis performance

Requirements Coverage	UC7-NoAvaliableData-Analysis-Performance
Input Data	Invalid new analysis selection, recalculate button
Procedure	<ol style="list-style-type: none"> 1. The end user clicks the “recalculate” button 2. Analysis server retrieves all the specifications chosen by the user 3. Analysis server initializes retrieval of data 4. Data is not available for the selected type of analysis 5. Display error message indicating the analysis is not possible and prompt reselection
Expected Outcome	The analysis is not performed and no changes are made; the user is prompted to reselect an analysis and parameters
Notes	

Test ID	7.4
Category	Evaluation of analysis performance
Requirements Coverage	UC7-PartialAvailableData-Analysis-Performance
Input Data	Partially valid analysis selection, recalculate button
Procedure	<ol style="list-style-type: none"> 1. The end user clicks the “recalculate” button 2. Analysis server retrieves all the specifications chosen by the user 3. Analysis server initializes retrieval of data 4. Data is retrieved but only some data is available 5. Computation continues with the available data 6. Return result with partial computed data
Expected Outcome	The data required for the analysis has been retrieved and computed, but only partially. The system prompts the viewers to display the results.
Notes	

Test ID	8.1
Category	Evaluation of analysis and viewer rendering

Requirements Coverage	UC8-Results-Display
Input Data	Viewer selection, add viewers
Procedure	<ol style="list-style-type: none"> 1. Views server renders the results on the selected viewers 2. Viewers identify the number of series of data that need to be visualized 3. Viewers render results on selected viewers
Expected Outcome	The end user is now able to see the visualizations of selected analysis with selected parameters (year range, countries).
Notes	