

## Group Meeting Logs

<b>Present Group Members</b>	<b>Meeting Date</b>	<b>Issues Discussed / Resolved</b>
all	2021-03-27	Coding login
all	2021-03-28	getData class
Eric, Matti, Brendan	2021-03-29	Working on login
Eric, Matti, Brendan	2021-03-30	Working on login and viewer classes
all	2021-04-01	Analysis types and countries
all	2021-04-02	Scatter plot and viewer
all	2021-04-03	Bar graph, line graph and time series
all	2021-04-04	MainUI and report
all	2021-04-06	Final debugging and javadoc

## Test Cases

<b>Test ID</b>	Test 1
<b>Category</b>	User Logs into the system successfully
<b>Requirements Coverage</b>	UC 1 Successful User Login
<b>Initial Condition</b>	The login system has been initialized, and the credential database and server are correctly implemented
<b>Procedure</b>	<ol style="list-style-type: none"><li>1. The user selects login</li><li>2. The user provides a user name</li><li>3. The user provides a password</li><li>4. The user logs-in into the system and is presented with the main UI window)</li></ol>
<b>Expected Outcome</b>	The login form closes, and the user has access to the system
<b>Notes</b>	The user should provide a username and password in lower case, only using alphanumeric characters and no special symbols.

<b>Test ID</b>	Test 1.2
<b>Category</b>	User is unsuccessful in system login
<b>Requirements Coverage</b>	UC1 Unsuccessful User Login
<b>Initial Condition</b>	The login system has been initialized, and the credential database and server are correctly implemented
<b>Procedure</b>	<ol style="list-style-type: none"><li>1. The user selects login</li><li>2. The user provides a user name</li><li>3. The user provides a password</li><li>4. The user attempts to log into the system, either the username or password are incorrect</li></ol>

	5. The system prompts the user to input a correct username and password
<b>Expected Outcome</b>	The login form prompts the user to provide a correct username and password combination
<b>Notes</b>	

<b>Test ID</b>	Test 2
<b>Category</b>	Use Case 2: Selecting the analysis type to be performed.
<b>Requirements Coverage</b>	Use Case 2: Analysis type is selected.
<b>Initial Condition</b>	The user is logged in.
<b>Procedure</b>	1. The user selects an analysis to be performed from the analysis type list.
<b>Expected Outcome</b>	The analysis is selected successfully.
<b>Notes</b>	

<b>Test ID</b>	Test 3.1
<b>Category</b>	Use Case 3: Selecting a country to fetch and visualize data for.
<b>Requirements Coverage</b>	Use Case 3: Country's data is available.
<b>Initial Condition</b>	The user is logged in.
<b>Procedure</b>	1. The user selects a country from the countries list.  2. The user selects an analysis for the country and calculates the result.
<b>Expected Outcome</b>	The country's data is available, the analysis is completed, and the results are shown.

<b>Notes</b>	
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<b>Test ID</b>	Test 3.2
<b>Category</b>	Use Case 3: Selecting a country to fetch and visualize data for.
<b>Requirements Coverage</b>	Use Case 3: Country's data is not available.
<b>Initial Condition</b>	The user is logged in.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects a country from the countries list.</li> <li>2. The user selects an analysis for the country and calculates the result.</li> </ol>
<b>Expected Outcome</b>	The country's data is not available, and so a message is shown informing the user as such.
<b>Notes</b>	

<b>Test ID</b>	Test 4.1
<b>Category</b>	Use Case 4: Selecting the years for which the analysis type is to be performed..
<b>Requirements Coverage</b>	Use Case 4: The start and end years are valid for the chosen analysis.
<b>Initial Condition</b>	The user is logged in and has selected a country.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects the initial year from the start year list.</li> <li>2. The user selects the end year from the end year list.</li> <li>3. The user presses the calculate button.</li> </ol>
<b>Expected Outcome</b>	The country's data is available for the given time period, and the results are calculated and shown successfully.
<b>Notes</b>	

<b>Test ID</b>	Test 4.2
<b>Category</b>	Use Case 4: Selecting the years for which the analysis type is to be performed..
<b>Requirements Coverage</b>	Use Case 4: The start and end years are not valid for the chosen analysis.
<b>Initial Condition</b>	The user is logged in and has selected a country.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects the initial year from the start year list.</li> <li>2. The user selects the end year from the end year list.</li> <li>3. The user presses the calculate button.</li> </ol>
<b>Expected Outcome</b>	The country's data is not available for the given time period, and a message is presented informing the user.
<b>Notes</b>	

<b>Test ID</b>	Test 5.1
<b>Category</b>	Use Case 5: User Adds a Viewer
<b>Requirements Coverage</b>	Use Case 5: Viewer is added successfully
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects a viewer from the list.</li> <li>2. The user selects the add button to add the viewer.</li> </ol>
<b>Expected Outcome</b>	The viewer is successfully added to the User Interface.
<b>Notes</b>	

<b>Test ID</b>	Test 5.2
<b>Category</b>	Use Case 5: User Adds a Viewer

<b>Requirements Coverage</b>	Use Case 5: Viewer is not compatible with chosen analysis.
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects a viewer from the list.</li> <li>2. The user selects the add button to add the viewer.</li> </ol>
<b>Expected Outcome</b>	The user is notified with a message stating that the viewer is not compatible with chosen analysis.
<b>Notes</b>	

<b>Test ID</b>	Test 6.1
<b>Category</b>	Use Case 6: User Removes a Viewer
<b>Requirements Coverage</b>	Use Case 6: Viewer is removed successfully
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects a viewer from the list.</li> <li>2. The user selects the remove button to remove the viewer.</li> </ol>
<b>Expected Outcome</b>	The viewer is successfully removed from the User Interface.
<b>Notes</b>	

<b>Test ID</b>	Test 6.2
<b>Category</b>	Use Case 6: User Removes a Viewer
<b>Requirements Coverage</b>	Use Case 6: Viewer is not deployed.
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.

<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects a viewer from the list.</li> <li>2. The user selects the remove button to remove the viewer.</li> </ol>
<b>Expected Outcome</b>	The user is notified with a message stating that the viewer is not deployed onto the interface.
<b>Notes</b>	

<b>Test ID</b>	Test 7.1
<b>Category</b>	Use Case 7: Performing the analysis.
<b>Requirements Coverage</b>	Use Case 7: Analysis is calculated successfully.
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects the recalculate button.</li> </ol>
<b>Expected Outcome</b>	The analysis is calculated and results shown without any problems.
<b>Notes</b>	

<b>Test ID</b>	Test 7.2
<b>Category</b>	Use Case 7: Perform the Analysis
<b>Requirements Coverage</b>	Use Case 7: Analysis performed unsuccessfully
<b>Initial Condition</b>	The user is logged in and has selected an analysis and a country and years for the analysis to be performed on.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The user selects the recalculate button.</li> </ol>

<b>Expected Outcome</b>	Analysis cannot be performed due to insufficient data and a error message is sent to the user.
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<b>Test ID</b>	Test 8
<b>Category</b>	Use Case 8: Displaying the results.
<b>Requirements Coverage</b>	Use Case 8: The results are displayed unto the UI.
<b>Initial Condition</b>	The user is logged in and selected the analysis type, time period, and countries and selects the calculate button.
<b>Procedure</b>	<ol style="list-style-type: none"> <li>1. The data is fetched from the world bank database.</li> <li>2. The computations are completed.</li> <li>3. The results are displayed using viewers.</li> </ol>
<b>Expected Outcome</b>	The results are displayed onto the UI through viewers..
<b>Notes</b>	