

GUI testing can not be done throughout unit testing, which the better test strategy chosen for this development process. For this reason, we would be testing GUI through a course of inputs from user on to Graphical interface, and the outputs should be changes on the screen, logs coming out from the GUI sub-component itself or Logic sub-component.

The tests below are not listed in the order of importance, rather in order that they should be done.

1- World Map

This test is done to see if the World Map is shown correctly or not. To do the test, the data should be loaded into the Logic sub-component, and then the GUI would be asked to show the World Map.

2- Territory Selection On a Plain Phase

The test is done to see if a territory can be selected on a normal mid game phase or not. To do the test, the user should select a territory on the map, and we would expect a log coming from GUI sub-component that "Territory A was selected".

Furthermore the territory should be highlighted on the map, which would be another mini test of GUI as well.

3- Territory Selection in the Fortification Phase

The test is done to see if a territory can be selected in the Fortification Phase, and thus it can be fortified with more troops through Logic. To do the test, the user should select a territory on the map, and we would expect a log coming from GUI sub-component which states "Territory A was selected", and a log coming from Logic sub-component which says the fortification on territory A was called.

If the Logic is working, we would be able to see the fortification on the screen as well.

4- Invasion initiation

The test is done to see if an invasion can be initiated through the GUI or not. To do the test, a territory should be selected in the invasion phase, and then an enemy territory should be selected. We would be expecting a log coming from GUI, stating the there would be an invasion from territory A to territory B.

As of the previous cases, if the Logic is working, the invasion will start and we can move down to the next test.

5- Invasion continuation

As discussed before, an invasion can be stopped between any two rolls, or it can be continues as well. This test stands to test the same capability on the GUI. After every dice roll and simulation, a dialog should be waiting to see whether simulation should continue or not. There would be two buttons on the dialog, each of which should be pressed, and the expected log should show up, meaning that the desired Logic parts would be called afterwards.

6- Moving Troops

The test is done to see if through the invasion phase, a player can move some troops between their own territories or not. The first territory should be selected due to test no. 2, and then the second territory should be selected. If it's a friendly territory, the player should be asked about the number of troops desired to move. This is where we are expecting a log from GUI, and a call to Logic, which would print some logs as well.

If the Logic is working, we should be able to see the changing number of troops on the screen as well.

7- Summary Showing

This test is designed to see if the GUI can handle the summary that comes down from server or not. It's needless to mention that to make this test, a complete Logic sub-component is required. The way to do this test is to send some summary from the server towards the client, where the summary would be processed by the Logic, and the results would be sent to the GUI to be shown. We would expect the summary to be shown on the screen, step by step, move by move.

8- The Main Menu Buttons

These tests are designed to check that the buttons on the main menu are working. The whole test process would be the user pressing the buttons and wait for a log to be generated by the GUI sub-component that the button was pressed.