Use Case : Start Simulation

Id: 1

Level: Medium

Description :
      The GUI and the simulation are initialised with the initial conditions. This includes Boat in (0,0) position and 1% Oil Spill in the centre of the grid. The Rule needs to be selected and 'Start ' button clicked. The Boat and the Oil Spill programs start running. The UI is updated accordingly.

Actor(s): User.

Stakeholders and Interests : User

Pre - conditions :

1. Java installed(Works on JRE).
2. JAR File clicked to launch.
3. Rule selected for Boat Movement.

Trigger :
      'Start' button is clicked on the UI.

Post Conditions :

1. Clean Grid with no Oil Spill on the UI.
2. Oil Spread(%) and Oil Cleanup(%) should be 100.
3. Boat continuing movement according to Boat Rule unless 'Stop' or 'Pause' clicked.

Main Scenario:

1. Boat starts from top left most position(0,0).
2. Boat starts moving and cleaning according to the Boat Rule 1/2/3 Algorithm. Oil Spills according to the algorithm in spreadOil.
3. Boat Refuels if Load Capacity reaches 100% or Battery Capacity is 0%.
4. Oil stops spreading. Boat Cleans up all the oil

Alternate Scenario : None