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|  | **Purpose** | **Precondition** | **Action** | **Expected Result** | **Actual Result** |
| **1** | Start a new game | No game exists | The user starts a new game with the name "Admiral Iman" | A new game is created, war chest has a 1000 pounds, and reserve fleet is loaded | A new game instance is created  War Chest: £1000.0  Status: is not defeated  Reserve Fleet contains 10 ships (Victory, Sophie, Endeavour, Arrow, Belerophon, Surprise, Jupiter, Paris, Beast, Athena) |
| **2** | Commission a ship within budget | War chest has £1000 and "Victory" costs £500 | User commissions "Victory" | "Victory" is added to squadron, war chest = £500 | War Chest: £500.0  --Squadron--  Ship Name: Victory, Captain: Alan Aikin…  Ship state is set to ACTIVE |
| **3** | Commission a ship beyond budget | War chest has £100 and "Belerophon" costs £500 | User tries to commission "Belerophon" | "Insufficient funds" message appears, no change in squadron | "Not enough money" message appears, no change in squadron |
| **4** | Decommission a ship | "Victory" is in the squadron | User decommissions "Victory" | "Victory" returns to reserve, war chest +250 (half refund) | Ship state is set to RESERVE  War Chest: £350.0  \*\* (money before = £100) \*\*  "Victory" returns to reserve fleet:  --Reserve Fleet--  Ship Name: Victory, Captain: Alan Aikin… |
| **5** | Try to decommission a sunk ship | "Victory" is sunk | User tries to decommission "Victory" | "Sunk ships cannot be decommissioned" error appears | Enter ship name to decommission:  Victory  “Decommission failed” message appears |
| **6** | Fight an encounter (win) | "Victory" (skill = 3) is active, Encounter 1 (skill required = 3, prize = 300) | User fights Encounter 1 | "Victory" wins, prize +300 | 0 Encounter won by Victory  War Chest: £800.0  \*\* (money before = £500) \*\*  "Victory" state is set to RESTING |
| **7** | Fight an encounter (lose - sunk) | "Endeavour" (skill = 4) vs. Encounter 4 (skill required = 9) | User fights Encounter 4 | "Endeavour" is sunk, prize -200 | 2 Encounter lost on battle skill - Endeavour sunk  War Chest: £500.0  \*\* (money before = £300) \*\*  "Endeavour" state is set to SUNK |
| **8** | Fight an encounter (no suitable ship) | No ship in squadron can fight a Blockade | User selects a Blockade encounter | "No suitable ship available" error appears, prize money - deduction applied | 1 Encounter lost as no ship available  War Chest: £450.0  \*\* (money before = £600) \*\* |
| **9** | Game Over - No funds & No ships | War chest <= 0, no ships in the squadron that are ACTIVE or RESTING | User tries to continue | "Game Over: You have lost your job" message appears | “You have been defeated” message appears |
| **10** | Save game state | Game is running | User saves to "saveFile.dat" | "Game saved successfully" message appears | “Write to file” message appears as game state is serialized and saved to file successfully |
| **11** | Load game state | "olenka.dat" exists | User loads game | "Game state restored" and game resumes from the saved point | “Recommission from file” message appears as game state is deserialized from file and restored successfully |
| **12** | GUI: View squadron | Squadron contains "Victory" | User clicks "List Squadron" button | A JTextArea shows "Victory" | Ship Name: Victory, Captain: Alan Aikin, Skill: 3, Fee: 500, Ship State: Active in squadron, 3, 30, ManOWar |
| **13** | GUI: Commission a ship | Reserve fleet contains "Arrow" | User commissions "Arrow" via GUI | "Arrow" is added to squadron, confirmation via JOptionPane | Ship Name: Arrow, Captain: Dan Dare, Skill: 5, Fee: 150, Ship State: Active in squadron, Type:Sloop, Doctor: true |
| **14** | GUI: Fight encounter | "Paris" (skill = 5) is active | User selects Encounter 9 via GUI | The battle outcome is shown via JOptionPane | 0 Encounter won by Paris  War Chest: £1000.0 |