## Initial Test Case Identification (November 16)

- 1. Test that the initial state is loaded correctly
- 2. Test unloading the Cat container
- 3. Test loading new containers onto the ship
- 4. Test attempting to unload a non-existent container
- 5. Test loading with an empty list of containers
- 6. Test unloading with an empty list of target containers
- 7. Test that empty operations don't add unnecessary time
- 8. Test balancing with just one container
- 9. Test when no valid moves are possible for balancing
- 10. Test all ship cases from Keogh
- 11. Save a ship configuration and verify its correctness.
- 12. Test that loading 90 containers takes less than 15 minutes
- 13. Test that unloading 90 containers takes less than 15 minutes
- 14. Test that balancing 34 containers takes less than 15 minutes

#### Test Execution and Results (November 23)

- 1. Success
- 2. Success
- 3. Success
- 4. Fail; adjustments made accordingly
- 5. Success
- 6. Success
- 7. Success
- 8. Success
- 9. Success
- 10. Success
- 11. Success

# Follow-Up Tests (December 8)

Additional tests were performed to verify performance and stress-test the system:

### Stress Testing

- 12. Success
- 13. Success
- 14. Success

## **UI** Testing

1. Verify layout and functionality on different screen sizes: Success (manual test).