Introduction to Software Engineering

Working Software

The student team is required to complete the **Working Software** documentation for the assigned course project, following the attached template.

Software Engineering Department
Faculty of Information and Technology
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Automated Testing and Working Software

Objectives

This document focus on the following topics:

- ✔ Completing the Automated Testing & Working Software document with the following sections:
  - Automated Testing
  - Working Software

1 Member Contribution Assessment

ID	Name	Contribution (%)	Signature
23127006	Trần Nguyễn Khải Luân	20%	
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23127179	Nguyễn Bảo Duy	20%	
23127189	Trần Trọng Hiếu	20%	

2 Automated Testing

2.1 Automated test case 1

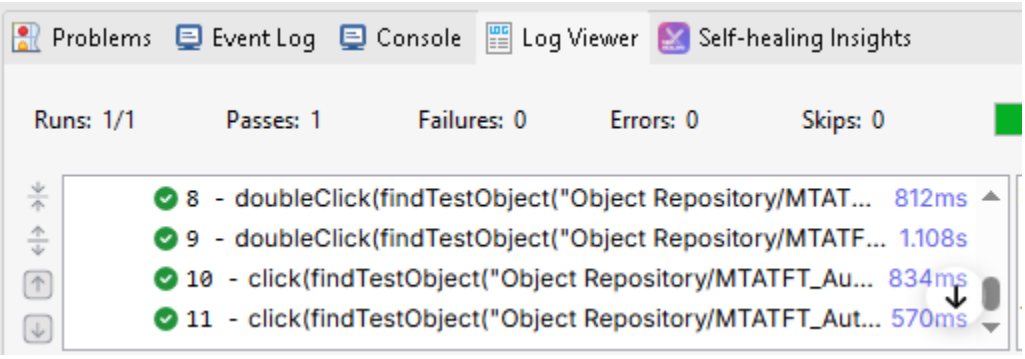
Test Case Name: TC01_Auto_ViewTopComps_DataDisplay

Description: Verify that the Top Comps page loads and displays the composition list correctly (e.g., Aatrox, Galio).

Test step:

- Step 1: On the toolbar, click the Record Web button (red globe icon).
- Step 2: Enter the URL `http://localhost:5173` and click Record.
- Step 3: When the browser opens the homepage (Top Comps):
    - Wait for the page to load completely.
    - Click on the text "Aatrox, Galio, Gangplank" (first row).

Test Result:



2.2 Automated test case 2

Test Case Name: TC02_Auto_ViewUnitStats_TierGrouping

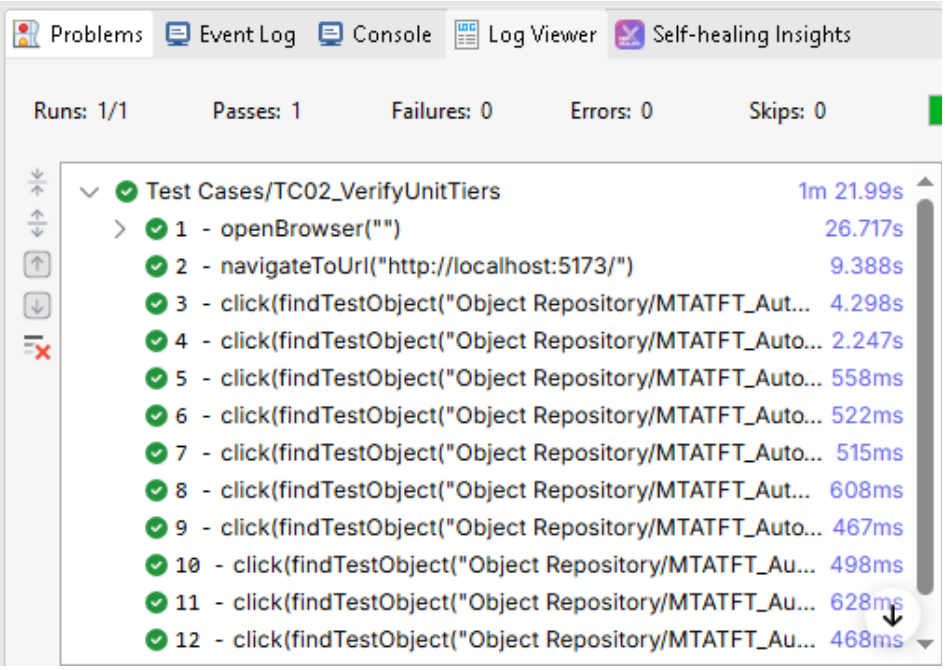
Description: Navigate to the "Units" tab and verify champions are grouped by Tier (e.g., Ezreal in Tier 1, Vi in Tier 2).

Test step:

When the browser opens:

- Step 1: Click the STATS menu on the navigation bar, then select UNITS.
- Step 2: Scroll down slightly to see the champion list.
- Step 3: Click on "Ezreal" (inside the Tier 1 brown frame).
- Step 4: Click on "Vi" (inside the Tier 2 light blue frame).

Test Result:



2.3 Automated test case 3

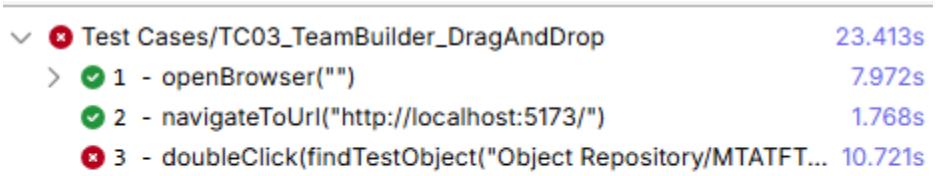
Test Case Name: TC03_TeamBuilder_DragAndDrop

Description: Verify the drag-and-drop functionality by moving the unit "Jinx" from the Unit Selector to a specific tile on the Hex Grid.

Test step:

- Step 1: Navigate to the /team-builder page.
- Step 2: Locate "Jinx" in the unit list.
- Step 3: Perform drag-and-drop action onto the board.:
- Step 4: Observe the board state.

Test result:



Explain: This Katalon can not track drag and drop action. When test manually, it still runs correctly.

2.4 Automated test case 4

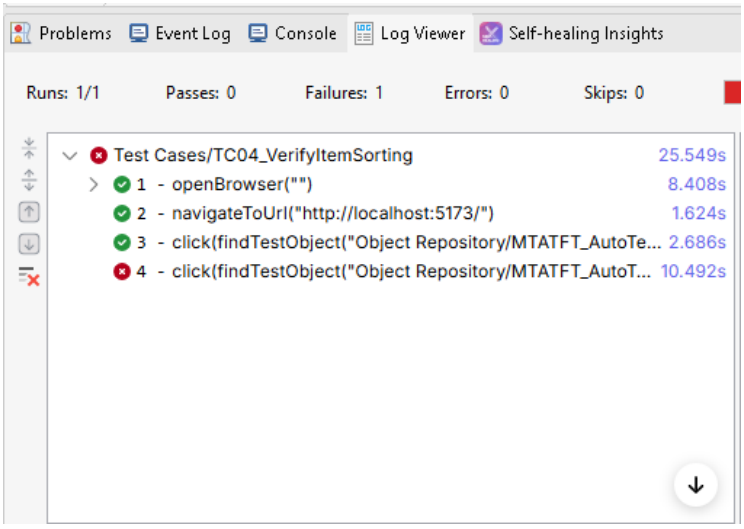
Test Case Name: TC04_VerifyItemSorting

Description: Verify the sorting functionality of the Items list by clicking on column headers (e.g., "Win" or "Top 4") to reorder the data..

Test step:

- Step 1: Click the **STATS** menu on the navigation bar, then select **ITEMS**.
- Step 2: Click on the column header “Win” to see winrate of each item in descending order
- Step 3: Click on the column header “Win” again to reverse the order

Test result:



Explain: The tool executes commands too quickly so the browser doesn't have time to process the animations or JavaScript events.

3 Working Software

The team has prepared the demonstration video which shows all features working.
Video URL: Link

4 Project Presentation

The team has prepared the presentation slides covering all required aspects.
Presentation Slides: Link