

Logicblocks by Techligence Robotics Task Sheet

Sprite Management

January 8, 2024

Important All the **underlined** text are **links**, which might not be visible based on your application, so do not forget to click any underlined text throughout the document and make sure to follow the coding standards given in the file.

1 Introduction

Welcome to another collaborative task. In this task you will work on the following three topics collaboratively.

1.1 Sprite-Specific Blocks

Implement functionality in the Blockly workspace to display blocks relevant to the currently selected sprite only.

1.1.1 Action Items

Identify the criteria for block visibility relative to sprite selection. Modify the Blockly workspace mechanism to show/hide blocks dynamically based on sprite selection.

1.2 Asset Loading Optimization

Objective: Enhance application load times and runtime performance by optimizing how sprites and backdrops are loaded.

1.2.1 Action Items

Utilize React.lazy for dynamic imports, enabling components to be rendered lazily. Prioritize and sequence asset loading, identifying critical assets for immediate load versus those suitable for deferred loading. Further reading React.memo and useMemo.

1.3 Auto-Saving v2.0

Objective: Build upon the current block auto-save functionality to include the auto-saving of sprite and backdrop assets.

1.3.1 Action Items

Develop auto-save logic for the state of all assets within the workspace. Introduce a UI component to notify users of successful auto-saves.

2 Establishing a Unified Development Branch

To maintain consistency and ensure smooth integration of new features, all development for the specified tasks will be contained within a single branch derived from the main branch.

2.1 Branch Creation

Create a new branch from the main branch specifically for this task, ensuring it is up-to-date with the latest stable changes.

Name the branch accordingly.

2.2 Team Collaboration

All three teams responsible for sprite-specific blocks, asset loading optimization, and auto-saving enhancements will collaborate on this single branch.

This approach will facilitate the management of dependencies and minimize merge conflicts.