

Logicblocks by Techligence Robotics Task Sheet Document Maker

March 20, 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 Overview

This task involves developing a document maker extension for Scratch. You need to create blocks for various types of formatting such as different levels of heading, paragraphs, links, lists, etc. The resulting document should be previewed in the canvas.

2 Purpose

Documentation is crucial part of any activity as it provides the user with the entire context about the relevant topic. The idea is to have a simple interface for creating documents quickly. This functionality would be beneficial for students who are just getting started with documentations.

3 Motivation

We have two use cases where documents are a primary form of communication

- Task sheet creation
- Intern document maintenance

You have an opportunity to create something that will not just be of use to you but also by the other teams and throughout the organization since documentation is a crucial part of any activity in software development.

4 Block Structure

4.1 Creation of Format Blocks

- List down the most commonly used text formatting options
- Each type of formatting should be handled by its own block (For example - Headings should be specified using a "Heading" block)
- The input to these blocks should come from user, the block's functionality would be to format the given text as per the block that is selected

4.2 Canvas Preview

- The text and the newly created blocks should be rendered on the canvas for preview
- Maintain proper font-sizing, margins, line spaces to make the document look professional
- Ideally, there should be minimal difference between the document rendered by our extension and the document generated by popular document processors like Google Docs / MS Word.
- Bonus task - Provide an option to save the document created

4.3 Real-Time Update Mechanism

- Have the ability to generate live preview
- The preview should be updated as soon as any changes are detected in the block structure

The successful implementation of this system will provide users some understanding of the extension creation in Scratch as well as developing a customer oriented mindset.