

# Techlignce Robotics Task Sheet

## Layout Modes

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.

### Enhanced Layout Modes for Scratch

In the standard Scratch interface, the layout comprises a toolbox on the right, a central workspace, and a canvas area where sprites and backdrops are selected and manipulated, as illustrated below:

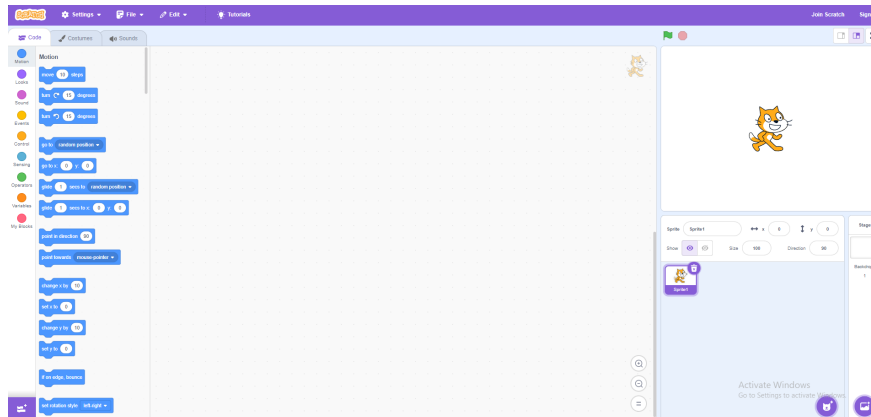


Figure 1: Normal Scratch environment

However, alternative configurations can enhance user experience, particularly for complex projects.

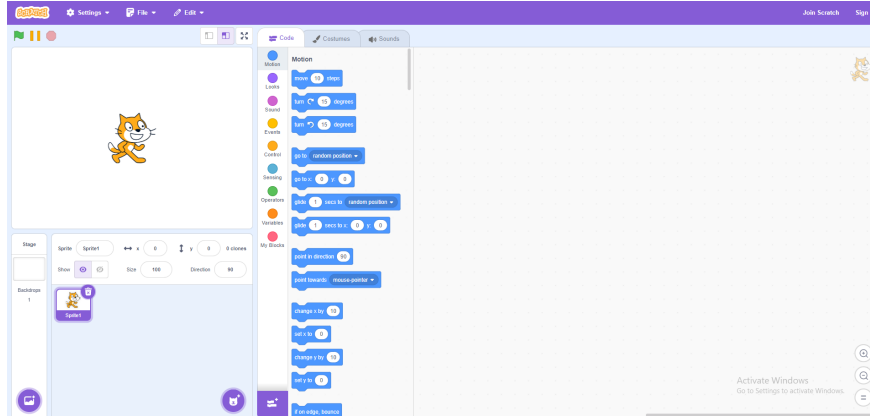


Figure 2: Illustration of the modified Scratch environment.

We propose two new modes:

### Mode 1 : Integrated and Collapsible Components

In this mode, the canvas, sprite selector, and backdrop selector are merged into a single, collapsible component. This innovation allows the workspace to expand across the entire screen, optimizing space utilization and focusing on project development.

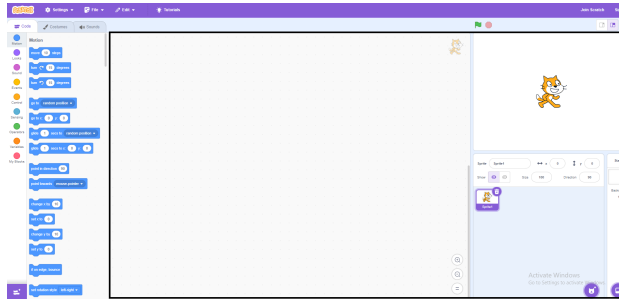


Figure 3: Depiction of the Scratch environment with an integrated component layout, showcasing the expanded workspace.

### Mode 2 : Optimized for Large-Scale Projects

For projects that require extensive screen width, this mode positions the canvas at the bottom of the screen. This adjustment ensures the workspace can occupy the full screen width, catering to the development of large-scale projects.

### Toggle Between Layouts

To enhance flexibility, a toggle or button will be introduced, allowing users to seamlessly switch between the default layout and the newly proposed Mode 1 and Mode 2. This feature ensures users can adapt the interface to their project needs and preferences efficiently.

### Conclusion

These proposed modes aim to enhance the Scratch interface by providing users with more flexible and space-efficient layout options, thereby supporting a wider range of project complexities and user preferences.