Game Maker - Assignment 4

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Description

- The goal of this week 4 assignment was to create an application that can build games and allow the user to play the built game at the same time.
- The user is allowed to choose sprites by assigning them names, shapes and colors.
- The user is allowed to specify various events and behaviors to the selected sprite.
- The user is allowed to set the stage (background) of the game
- The user could also save the built game midway through the game building process and load it to continue working on it later

Architecture

- We have implemented MVC (Model View Controller) design pattern to achieve the above.
- The Main Controller is the heart of our application. It has the reference to the Maker Controller and the actual Game Engine.
- Whenever the user creates any sprite or selects any behavior to be attached to the sprite the FormLayout(View) relays the trigger to the Main Controller.
- Controllers are responsible for making changes to the GameObject's model classes.
- We have used Strategy design pattern to describe various collision behaviors and move behaviors.
- Collision Detection utility is used to detect any collisions between 2 GameObjects and which then triggers the collision behavior attached to that game object.