## Patterns used in RWM Project

## Singleton

In my component of the RWM Project which was the Dialogue System, I used the Singleton pattern for the dialogue manager object. The idea is that there is only one instance of the dialogue manager throughout the game, so each dialogue instance can access the dialogue manager's public components through the static instance of the class. This includes things like the dialogue panel, text, npc name, etc.

## Command

In this same component the Command pattern is used with Unity Delegates. When the dialogue options are parsed, depending on the input of the loaded dialogue file, functions are delegated to the button's onclick event. After the parsing the buttons are displayed to the user.

## Factory

This pattern is used when Instantiating the buttons as they are loaded through a prefab containing a single button with all the needed components with no specific information. The buttons become unique after the parsing is finished on the dialogue file.