

## Find the Objects

### CSC 335 Final Project

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- **Visual and GUI**

- **StyleManager**

- This class handles assets that are re-used throughout the GUI, including colors and fonts.
    - Storing the colors into a single class like this makes it convenient because it can switch between light-mode and dark-mode colors easily with a boolean flag, meaning getter methods can automatically retrieve the light-mode or dark-mode color variant automatically.

- **AnimatonPane**

- This class extends **Pane** and is placed directly above the **GridPane** that holds the word tiles so that it can play movement-heavy animations (such as word tiles switching positions) that should not be constrained to the **GridPane**.
    - It handles the animation where up to four selected word tiles swap with the word tiles on the current row (beneath the bottommost answer if it already exists) and the answer pop ups.

- **GameTileAnswer**

- Extends **StackPane** and holds the **Text** objects showing the name of the answer category, the list of words for that answer category, and the **Rectangle** of that color.

- **GameTileWord**

- Extends **StackPane** and holds the **Text** object with the contents of the word the tile represents and the **Rectangle** background beneath that **Text** object.

- **GameBoard**

- The actual JavaFX application that is run: it holds all of the main game logic and orchestrates all of the visual elements including the board of word tiles, the results screen, and so on.

- **Data Storage and Organization**

- **DifficultyColor**

- An enum that has the four possible colored difficulties or categories in Connections: YELLOW, GREEN, BLUE, PURPLE.

- **Word**

- Holds the String text of a particular word and the color it corresponds to: this is useful for grouping words together to see if there is a match (a correct answer).

- **GameAnswerColor**

- For a particular color (YELLOW, GREEN, BLUE, PURPLE), this class holds all of the words for that category, the String description explaining the category, and any String hints.
- **GameData**
  - Associates every color (YELLOW, GREEN, BLUE, PURPLE) with a particular **GameAnswerColor** so that it is easy to retrieve any information (words, description, hints) given a particular color.
- **GameDataCollection**
  - Has every single game (as a **GameData** object) that was read from a file. It also has code for parsing the file and printing and handling errors where necessary.