Feature Number: 4

Feature Name: User Interface

Programmer: Collin Hughes

Tester: Peter Giovi

- A set of classes for displaying UI elements on the screen. Elements will include buttons, textboxes, images, sliders, radio buttons, list boxes, check boxes, input textbox, panel.
    - Buttons - click causes an event
    - Textbox - displays text on the screen
    - Images - displays a Texture2D on the screen
    - Sliders - slides to increase or decrease a value
    - Radio Button - toggles between multiple options, one must always be selected
    - List Boxes - when button is clicked, a list of button options appear, each causing an event
    - Check Boxes - button that toggles a boolean value
    - Input Textbox - textbox that updates with user text input
    - Panel - logical grouping of elements
- UI Element - Base class for all UI elements.
    - Properties
        - Enabled
        - Interactable
- Buttons - Click causes an event
    - OnClick - Method that is called when clicked
    - Texture
- Textbox - Displays text on the screen
    - Text - String that is displayed on the screen
    - Texture
- Images - Displays a Texture2D on the screen
    - Texture
- Sliders - Slides to increase or decrease a value
    - Slider Texture
    - Handle Texture
    - Value
    - OnUpdate - Called when value changes
- Radio Button - Toggles between multiple options, one must always be selected
    - Texture
    - Group
    - Enabled
    - Fill Texture

- List Boxes - When button is clicked, a list of button options appear, each causing an event
    - Texture
    - Button List - List of buttons for options
- Check Boxes - Button that toggles a boolean value
    - Texture
    - Fill Texture
    - Value
- Input Textbox - Textbox that updates with user text input
    - Texture
    - Text
    - Submit Button - Calls an OnClick event to update corresponding value
- Panel - Logical grouping of elements
    - Texture
    - UI Elements

Menus

- Main Menu - First scene to display when user launches the game. The buttons, when clicked change to the specific scene, or close out of the game
    - UISprite - Logo
    - Start Race Button - Changes scene to setupMenu
    - Options Button - Changes scene to optionsMenu - Currently not interactable
    - Quit Button - Exits the application
- Setup - Scene that is displayed when the start race button is selected on the main menu. Contains all the information needed to setup a race. The user will enter the name of the map file, select how many cars will be used, and the instructions files for those cars.
    - Input Textbox - User enters the map name
    - 2 Radio Buttons - Number of cars
    - 2 Input Textboxes - User enters the car instruction file
    - Start Race Button - Changes the scene to level
    - Main Menu Button- Changes the scene to main menu