

Scene Class:

- needs to have a UI object defined
- calls UI->OnCreate() in Scene::OnCreate()
- calls UI->Update() in Scene::Update()
- calls UI->Render() in Scene::Render()
- call UIManager->HandleEvents() when the player clicks on an interactable UI element or presses the button to pull up a sub menu

UI Manager Class:

- manage the UI changing an element(s) when:
 - a mouse event (i.e. OnMouseOver(), OnMouseDown, and OnMouseUp()) occurs
 - key event (i.e. OnKeyDown(), OnKeyUp()) occurs
 - when the player has been hit or killed
 - when the player uses an item or ability
- manage the UI completely changing when loading between the game and menu
- have a sub menu when the player presses a certain button

The Scene class treats the UI as an object that and calls its methods in the corresponding classes. The scene creates, updates, renders and destroys the UI. The UI Manager class is called by the scene and affects the UI based on the input it receives. It affects what parts of the UI are rendered on the screen such as a larger map.