



# Welcome to Number Wizard UI

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)



GDD



Section Notes

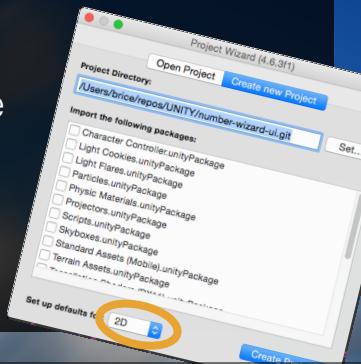


# Creating New Scenes And Levels

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## Creating new Scenes and Levels

- We'll create a new **Start**, **Win**, **Game** and **Lose** scene in a new 2D project
- Scenes and Levels are the same
- That's it :-)



## How To Add Text To The Scene

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## Create three new scenes

- In the same way as we created the **Start** scene create the **Game**, **Lose**, and **Win** scenes



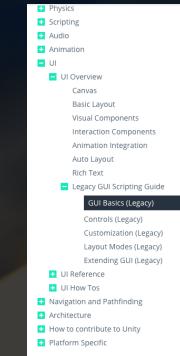
## In this video

- How to add a text element to a scene
- How to scale and position text elements
- Using the UI mode to position elements

## Add a subtitle

- In the same manner as we added a title, add a subtitle prompting the user to make a choice of number

## Be Aware of old style GUI code



### Making Controls with UnityGUI

UnityGUI controls make use of a special function called `OnGUI()`. The `OnGUI()` function gets called every frame as long as the containing script is enabled - just like the `Update()` function.

GUI controls themselves are very simple in structure. This structure is evident in the following example.

```
// Example level loader *

// JavaScript
function OnGUI () {
    // Make a background box
    GUI.Box (Rect (10,10,100,90), "Loader Menu");

    // Make the first button. If it is pressed, Application.LoadLevel (1) will be executed
    if (GUI.Button (Rect (20,40,80,20), "Level 1")) {
        Application.LoadLevel (1);
    }

    // Make the second button.
    if (GUI.Button (Rect (20,70,80,20), "Level 2")) {
        Application.LoadLevel (2);
    }
}

using UnityEngine;
using System.Collections;
```

## Adding A Start Button

@UnityCourse

[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## In this video

- How to change a text element to be a button
- How to make the button respond to mouse hover and click
- Adding a quick button

## Add a Quit button

- Add a quit button for yourself below the start button

## Calling Scripts From Buttons

@UnityCourse

[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## Calling scripts from buttons

- Create a new script to handle level management
- Call the script from the buttons
- Check everything works by logging out to the console

## Do the same for the Quit button

- Wire up the quit button so that every click logs out to the console

## How To Load Scenes And Quit

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

### How To Load Scenes And Quit

- We'll use **Application.LoadLevel()** to load a new level
- We'll use **Application.Quit()** to quit the game
- We'll look at the limitations of **Application.Quit()** and when it won't work as expected

### Create a Button to return to the start

- Using what you learned so far, create a button to return to the start scene from the game scene.
- You don't need to re-write a **LevelManager** script or re-create an object. It's ok to copy the existing one.

### Review of Scene Loading

Start Button

Level Manager

Legend

Game Objects

## Review of Scene Loading



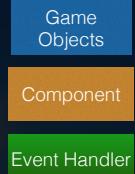
Legend



## Review of Scene Loading



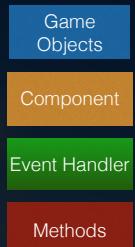
Legend



## Review of Scene Loading



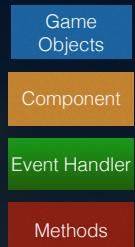
Legend



## Review of Scene Loading



Legend



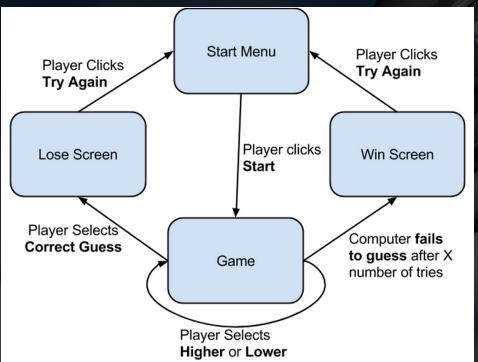
## Using a Game Design Document

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

### What is a Game Design Document?

- A tool to **communicate** between members of your team (Artists, Developers, Designers)
- A place to **record decisions** made before and during development. What's **in**. What's **out**.
- **Not a plan :)**

### Create the scene transitions according to the GDD



- Create buttons that transition between all scenes according to the GDD.

### Importing Number Wizard Code

@UnityCourse  
[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## Populate the Game Scene

- With text appropriate for your game
- Link up the guess higher and guess lower buttons to the Number Wizard game object
- Link up the correct button to the Level Manager's `LoadLevel()`

## Finishing Number Wizard

@UnityCourse

[facebook.com/UnityCourse](https://facebook.com/UnityCourse)

## Guess the numbers randomly

- Use `Random.Range()` to guess a random number instead of always choosing the halfway point in the NumberWizard script
- Optionally, ensure that the game starts on a anew guess instead of the initial 500



End of section QUIZ

