

# 3D Mobile Game Series

## Session 1: Introduction to 3D Mobile Game Development

**Tell us in the chat:** What's your favourite 3D mobile game?

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Instructor-Led Live Session		Instructor-Assisted Project Work		Project work with Instructor Office Hours

# Goals for this Series

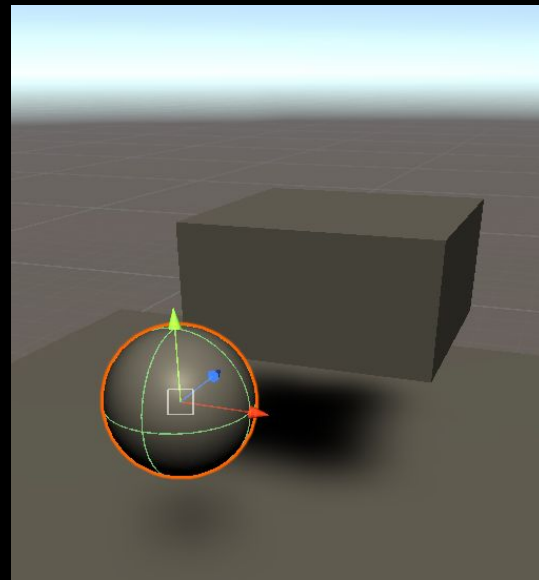
By the end of this session, you will be able to:

- Identify the features of Unity needed to create mobile games
- Identify the best methods to configure and maintain assets for high performance
- Identify best practices for writing C# in Unity
- Create optimized UIs for interactivity and playability
- Build animations and import them into Unity
- Manage a project with multiple scenes
- Identify camera functionality, options, and configurability
- Implement appropriate lighting configurations
- Recognize and solve common optimization issues

# Today's Objectives

By the end of this session, you will:

- Become familiar with the webinar format and the goals for this series
- Become [re]familiarized with the Unity editor
- Identify key features of Unity needed to create mobile games





# Today's Agenda

- ✓ Welcome and Introduction (15 min)
- What Makes Mobile Games Different (40 min)
- Getting Started in Unity (60 min)
- Review and Questions (5 min)
- Activity: Project Setup and Asset Collection (60 min)

# 3D Mobile Games

- Examples
- iOS vs. Android

What are your favorites?

What platform do you prefer, and why?



# Core Game Design Principles

- **Game objectives:** What are the objectives of the game, are they clear?
- **Rewards and Incentives:** Why will users play your game?
- **Usability:** How intuitive, enjoyable, and straightforward will it be for users?
- **Visual fidelity:** What trade-offs will you make for constrained devices?
- **Success Criteria:** How will you assess the success of a game?
- **Scalability:** Can your game grow?
- **Unique selling point:** What distinguishes your game from others?

# What's Your Game?

- **Game objectives**
- **Rewards and Incentives**
- **Usability**
- **Visual fidelity**
- **Success Criteria**
- **Scalability**
- **Unique selling point**

*What 3D mobile game would you like to develop?*

Fill in the Game Design Document template and consider the aspects of your game that would relate to these core principles.



# Today's Agenda

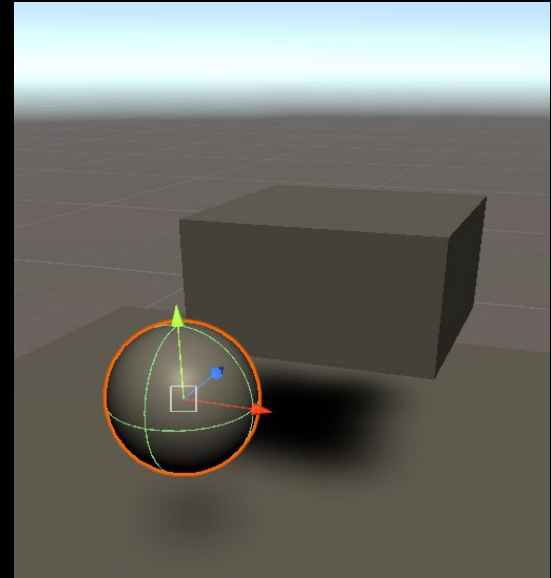
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# Get Started in Unity Step 1 of 3

## Creating a Scene



1. Use the Unity Hub to open and create a new 3D project.
2. Add primitives such as cubes and spheres to your scene.
3. Organize your primitives in the Hierarchy and Project windows.

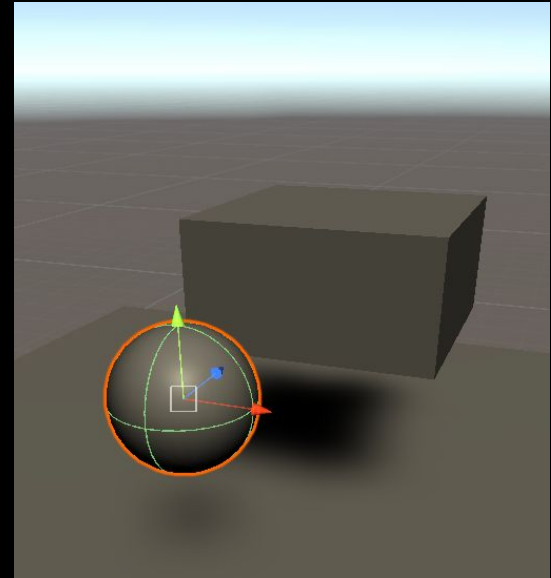


# Get Started in Unity Step 1 of 3

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# Get Started in Unity Step 2 of 3

## Working with Objects in Unity

Build a model of a snowman or other character using primitives with colliders and gravity.



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! If you're an experienced Unity user, get creative!

# Get Started in Unity Step 2 of 3

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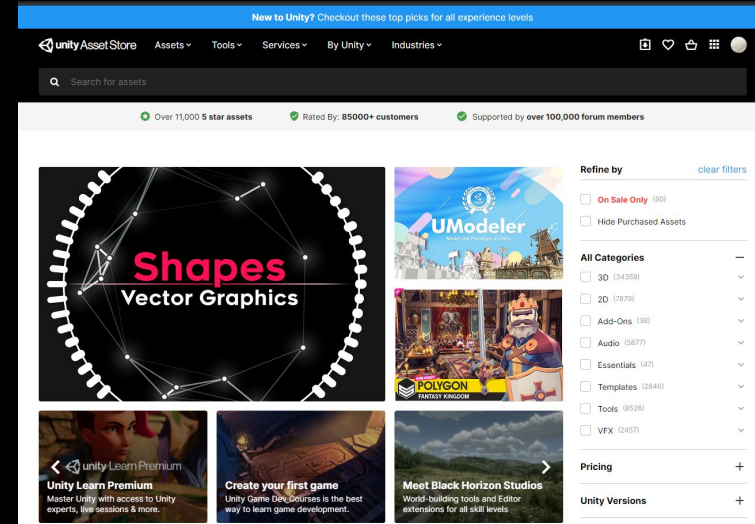


# Get Started in Unity Step 3 of 3

## Explore the Asset Store



Get familiar with the Asset Store  
at [assetstore.unity.com](https://assetstore.unity.com).



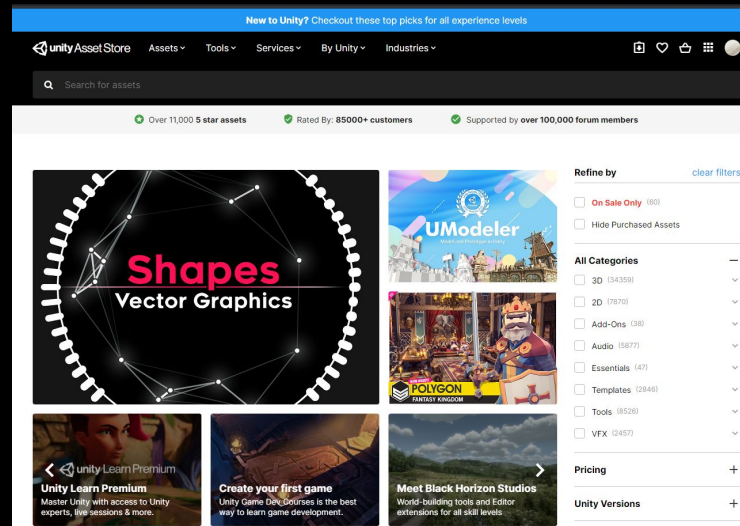
! We'll provide you with assets from the Simple Town collection from Synty Studios.  
(Don't purchase anything for this course.)

# Get Started in Unity Step 3 of 3

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# Recap

- What makes 3D mobile games different from others
- Core game design principles  
(Think about these for the project you'll develop in this course.)
- Getting [re]familiar with the Unity Editor and the Asset Store





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# Important Assignment!

**Install the Unity Version:** Before the next session, be sure to install Unity version 2019.3.15f1 on the computer you will use in this course.

**Download Project:** Before the next session, download the project file 3DMobileGaming-Assets.zip and unzip it.

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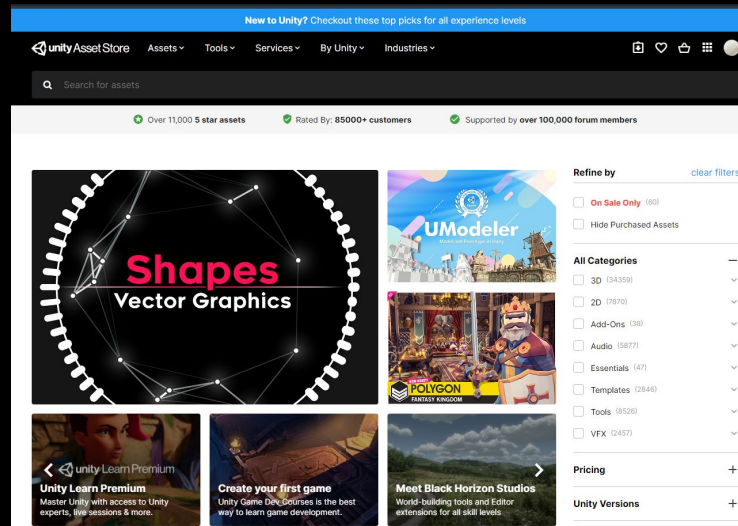
! Do these tasks ahead of time--they take a while, especially with slow Internet speeds.

# Activity 1 Goals: 1 hour

1. Sign up for Session 2 Office Hours.

2. Explore Unity:

- Create a new 3D project for mobile via the Unity Hub.
- Explore the Asset Store and populate the project with free assets that could be used for the game you designed.
- Create a mock-up scene with content that visually represents your idea(s).
- Take a screenshot and share it with the group.



# Questions?

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# Thank you.