

Unity 3D Fundamentals

1. Introduction to Unity

- Getting to know the Unity Editor
- The Project Dialog
- The Unity Interface
- The Project View
- The Hierarchy View
- The Scene View
- The Game View
- Navigating in Unity
- Flythrough mode

2. Game Objects

- Dimensions and coordinate systems
- Putting the D in 3D
- World vs Local coordinates
- Game Objects
- Transform, Translate, Rotate and Scale

3. Models, Materials and Textures

- Basics of Models
- Built-in 3D Objects
- Importing Models
- Textures, Shaders and Materials

4. 3D Terrain

- Terrain Generation
- Adding terrain to your project
- Terrain settings
- Heightmap Sculpting
- Importing terrain assets

5. Environments

- Generating trees and grass
- Painting trees and grass
- Environment effects
- Skyboxes

6. Lights and Cameras

- Lights
- Cameras
- Layers

7. Collision

- Colliders
- Collision
- Rigidbodies
- Physics Materials
- Triggers

8. Scripting

- Using Methods
- Input Basics

9. Animation

- Animation types
- Rig
- Creating an Animation

10. Animators

- Creating basic animator

11. Audio

- Importing audio clips
- Basics of Audio in 3D animation

12. Polish & Deploy

- Managing and establishing scene order
- Keeping objects
- Saving data
- Unity player settings
- Cross-platform settings
- Building your game
- Game and build settings

13. Basics of multiplayer in Unity

- Create an object to spawn for each connected player
- Testing Hello World