

Completed Unity3D Course Pathways

Junior Programmer – 2024



Level 1 Code Comprehension

- Interpret basic code in a Unity code base
- Improve simple code using the features of an IDE

Level 1 Application Scripting

- Control the execution of code with common logic structures
- Compose scripts that utilize various APIs
- Implement appropriate data types
- Write code that integrates into an existing system
- Cultivate a code style that is efficient and easy to read
- Prototype new concepts

Level 1 Debugging

- Diagnose and fix code that compiles, but fails to perform as expected
- Diagnose and fix common compilation errors
- Diagnose and fix compilation errors related to Unity's Scripting API
- Diagnose and fix the cause of an exception

Level 2 Application scripting

- Create the scene flow in an application state
- Implement data persistence across scenes and user sessions

Level 1 Version control

- Maintain a project by correctly implementing version control
- Implement best practices of version control using Unity Collaborate

Level 1 Code optimization

- Maximize code efficiency by correctly executing coding best practices
- Debug performance issues

Level 2 Programming theory

- Analyze the principal pillars of object-oriented programming
- Simplify code and make it reusable by correctly implementing the principles of inheritance and polymorphism
- Make code more secure and usable by correctly implementing the principles of abstraction and encapsulation, including the use of interfaces
- Write efficient, organized, and comprehensible code by correctly implementing the principles of object-oriented programming

Unity Essentials – 2024



Unity Essentials
Pathway
Unity Technologies

Creating and Managing Unity projects

- Install the Unity Editor for the first time

- Work with projects in the Unity Hub

Unity Editor Essentials

- Employ essential features of the Unity Editor

- Create and Manage Scenes

- Navigate in 3D space in the Scene view

- Navigate in 2D space in the Scene view

Real-time Industry Essentials

- Understand Unity's history and role within the industries that rely on real-time creation.

- Describe the real-time production cycle

Scene Building Essentials

- Identify the default elements in a new Scene

- Create GameObjects

- Transform GameObjects

- Work with components and Scripts

- Control the appearance of GameObjects

- Employ basic physics for GameObjects

Publishing

- Configure a basic build of a project

Level 1 Job Preparation

- Prepare yourself for the job search

- Create a portfolio, enabling you to pursue a job in real-time development

- Cultivate professional attitudes

- Plan your Unity learning journey by setting goals

- Practice continuous personal and professional growth