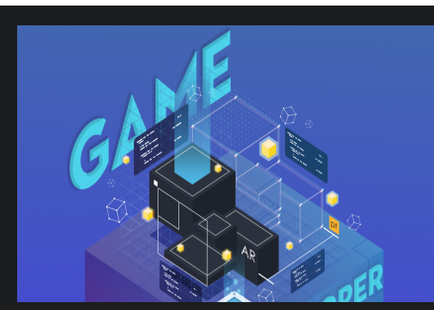
prep gurukul

YOUR SKILL PARTNER

Game Development with Python(Offline)

Learn to Build Engaging 2D and 3D Games Using Python and Pygame Framework



₹65000 ~~₹70000~~ 7.1% off

★★★★★

Date
01 May to 01 Aug 2025

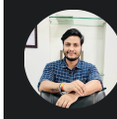
Time
11:00 AM - 12:00 PM

Total Sessions (Hours)
100 (120h 0min)

Location
Thaltej

Level
Expert

Language
English



Vinod Sonava
Instructor

Instructor Rating
5

Courses
22

WHAT YOU'LL LEARN

- Understand the core concepts of game development, including game loops, events, and collision detection.
- Build 2D and 3D games from scratch using Python and the Pygame framework.
- Implement interactive game mechanics, animations, and sound effects to enhance user experience.
- Design, develop, and deploy simple games, learning key aspects of game programming like physics, AI, and rendering.

REQUIREMENTS

Basic knowledge of Python programming and an interest in game design.

A computer with Python installed along with the Pygame library.

A passion for creativity and a desire to create interactive games.

WHO'S THIS COURSE IS FOR

Students, hobbyists, and developers eager to dive into game design and programming.

Entrepreneurs and developers looking to create their own games for personal projects or business.

DESCRIPTION

The **"Game Development with Python"** course is a hands-on, project-based learning experience designed to introduce you to the exciting world of game creation. Using Python and the Pygame library, you'll dive into the essentials of game development—from coding game loops and handling events to crafting animations and sound effects.

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Course Schedule and Durstion

- **Duration:** 4 Months
- **Start Date:** Option to start today also, instructor will adjust you to recently started batch. **Enroll now**

- **Days:** 6 days/week
- **Timings**:10:00 am to 3:30 pm (Choose your 2 hr as per you convenience)
- **Mode:** Offline (above Central Bank Of India, above Radhika's Authentic South Indian Food, Nilmani Society, Gurukul)
- **Languages**: English, Hindi & Gujarati
- **Fees:** INR 65,000/-

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Course Modules

Module 1: Introduction to Game Development

- Basics of game design and structure.
- Setting up Python and Pygame for game development.
- Understanding game loops and handling player inputs.

Module 2: Creating Game Elements

- Working with sprites and graphical assets.
- Adding animations and smooth transitions.
- Incorporating sound effects and background music.

Module 3: Game Mechanics and Interactions

- Implementing collision detection for game interactions.
- Creating game physics: gravity, velocity, and friction.
- Managing game states and level progression.

Module 4: Advanced Features

- Developing AI for Non-Player Characters (NPCs).
- Integrating user interfaces (UI) like menus and scoreboards.
- Handling multiple levels and saving game progress.

Module 5: Game Optimization and Deployment

- Techniques for optimizing game performance (frame rate, memory).
- Packaging games for distribution on Windows, Mac, and Linux.
- Introduction to mobile game development with Pygame.

Module 6: Capstone Project

- Design and develop a complete game from scratch.
- Apply all learned concepts: animation, physics, AI, and optimization.

- Showcase your game to peers and receive feedback.

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By the end of this course, you'll have developed your own fully functional 2D game and gained the skills to continue creating more complex games or even pursue a career in game development. Let's turn your passion for gaming into real-world coding skills!