KULVINDER SINGH THAKUR

Unity Game Developer & Designer

Creative and detail-oriented Unity Game Developer with hands-on experience in designing and developing engaging 2D and 3D games. Skilled in gameplay programming, scalable software architecture, and performance optimization. Proficient in implementing design patterns, multiplayer networking, and polished visual effects. Passionate about crafting memorable player experiences through thoughtful system design, dynamic levels, and balanced game mechanics. Strong collaborative mindset with solid problem-solving and debugging abilities.

TECHNICAL SKILLS

- Languages & Tools: C#, C++, HTML, Unity Engine, Krita, Vibe Coding (ChatGpt, cursor)
- **Programming Concepts:** Object-Oriented Programming (OOP), Design Patterns (Singleton, MVC, MVP, Observer, State Pattern, Object Pooling, Service Locator)
- Game Development: Unity Addressables, Ads Integration, Netcode GameObject, Cinemachine, Timeline, ProBuilder, Post-Processing Stack, Shader Graph(Basic), ScriptableObjects, Animator Controller, NavMesh Al, Finite State Machines (FSM), Analytics Integration (Firebase, Unity Analytics), Version Control (Git, Github, Plastic SCM)
- Game Design & Level Design: Level Design, System Design, Game Balancing, Difficulty Curves, Game Economy Design, Prototyping, Game Design Documentation (GDD), UX/UI Principles for Games
- Workflow & Soft Skills: Agile Methodologies (Trello, Miro), Code Optimization, Debugging, Rapid Prototyping, Communication, Problem-solving

PROFESSIONAL EXPERIENCE

Unity Game Developer | Zapplogics Solution | Nov 2024 - April 2025

- Developed and maintained multiple 2D and 3D game projects from concept to release.
- Optimized existing game code for performance, maintainability, and scalability using advanced design patterns and Unity best practices.
- Integrated Ads, Unity Analytics, and Addressables for efficient asset management and monetization tracking.
- Designed and implemented game features including level progression, difficulty scaling, reward systems, and multiplayer basics.
- Created polished visuals and immersive experiences using Cinemachine, Timeline, Post-Processing Stack, and Shader Graph.
- Applied Object Pooling, State Machine Systems, and Service Locator Pattern to manage game objects and states efficiently.
- Collaborated with design and art teams to develop gameplay systems and optimized level layouts using ProBuilder.
- Conducted regular playtesting and debugging to ensure smooth gameplay and consistent performance.

KEY PROJECTS:

- Vampire Platformer: 2D platformer game built using MVC, Observer Pattern, and Singleton Pattern. Handled game balancing, dynamic obstacle generation, and rapid prototyping.
- Missiles (Endless Dodging Game): Infinite dodging game where players avoid homing missiles and unlock new planes. Integrated Ads, Analytics, Object Pooling, Game Economy System, and Netcode basics for potential multiplayer features (In progress).

EDUCATION

B.Tech in Computer Science & Engineering May 2018 – May 2022

Technology Education & Research Integrated Institutions (TERii), Kurukshetra, Haryana

CERTIFICATION

Unity Junior Programming CertificationGame Development using Unity Engine