



SENG 463

SEC-01

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Project Report: X Fighters

GitHub: <https://github.com/Aysu-kursd/X-Fighters>

Summary:

X Fighters is a one-on-one fighting game. Our primary objective was to create an immersive, strategic, and visually stunning fighting game experience that would make every type of player can enjoy.

Introduction:

Our aim was to make a game that could be enjoyed by players. This report details our experiences, objectives, key features, and the components that make up X Fighters. This project aimed to provide players with a dynamic and strategic fighting game. With restricted battlegrounds, diverse characters, and a focus on action-packed gameplay, X Fighters sought to cater to a broad spectrum of gaming enthusiasts.



Project Objectives:

Restricted Battlegrounds:

Intense battles within confined spaces aimed at amplifying the thrill of one-on-one combat. Environmental dynamics and interactive elements were strategically incorporated to add layers of strategy to each match.

Diverse Character Selection:

There are different types of characters, each possessing a unique blend of fighting styles and different animations.

Timer and Life Gauge:

Time-limited matches of 90 seconds, infusing a sense of urgency and promoting strategic decision-making.

Victory hinges on depleting the opponent's life gauge within the allocated timeframe.



Player vs. AI Mode:

A challenging solo experience against AI opponents programmed to adapt to diverse playstyles. The AI mode aimed to provide a dynamic and engaging single-player experience.

Game Features:

Main Menu:

A central hub providing seamless navigation through game modes, options, and settings. User-friendly features include "Start," "Character Select," "Options," and "Exit," ensuring players have easy access to all aspects of the game.

Character Select:

A visually engaging interface where players can choose from a diverse array of characters. Comprehensive information on each character aids players in picking their characters.

Battle Environments:

Dynamic battlegrounds with interactive elements, contributing to the strategic depth of each match. Environmental hazards and visually captivating designs elevate the overall gaming experience.

Side View:

The classic side-view perspective delivers an intuitive and immersive fighting game experience. The 2D view ensures precise movement and strategic positioning, staying true to the genre's roots.

Options:

A menu that allows individual players to modify their preferences for controls, sound, and display settings. Ensures players have the flexibility to tailor their gaming experience according to their preferences.

Sound Effects:

Immersive sound effects complement the visual action, enhancing the overall audio-visual experience. Punches, kicks, and special moves are accompanied by impactful sound effects that resonate with the intensity of the battles.

Game Components:

Battleground:

A dynamic arena for one-on-one battles, strategically designed to enhance player engagement. Environmental details and interactive elements contribute to the immersive and strategic nature of each match.

Round Counter:

We wanted to create an intuitive counter tracking the progress of each battle, ensuring players stay informed and engaged.

Characters:

A diverse array of characters, meticulously designed with unique move sets, animations, and personalities. Each character contributes to the game's narrative, offering players a variety of playstyles and strategic options.



Health Gauge:

Visually representing the vitality of each fighter, allowing players to gauge the intensity of battles. Dynamic changes in the health gauge reflect the impact of successful attacks and strategic decisions.

Timer:

We aimed to give players 90 seconds time limit that serves as a catalyst for intense and fast-paced battles.

Functional Components:

Player:

The central component, allowing players to control and maneuver their chosen character. Responsive controls and fluid movement contribute to a satisfying and immersive gaming experience.

Attacks:

A diverse arsenal of moves including light and heavy kicks, punches, aerial attacks, special maneuvers, and more. Each attack comes with a unique animation, contributing to the visual spectacle and strategic depth of battles.



Pause Menu:

A seamless pause menu providing players with options to access settings, quit, or resume the game. Ensures players can navigate the game effortlessly without interruptions.

Non-Functional Components:

Performance Requirements:

The game is playable in almost every computer, ensuring a consistent and enjoyable gaming experience.

Safety Requirements:

As an offline game, safety concerns focus on promoting responsible gaming practices.

In-game reminders and breaks between matches encourage players to maintain a healthy gaming routine.

Security Requirements:

Minimal security concerns due to the offline nature of the game.

Attention is given to preventing unauthorized access or tampering with game data to ensure the integrity of the gaming experience.

Software Quality Requirements:

Rigorous testing, including Quality Assurance processes, guarantees a bug-free and polished gaming experience.

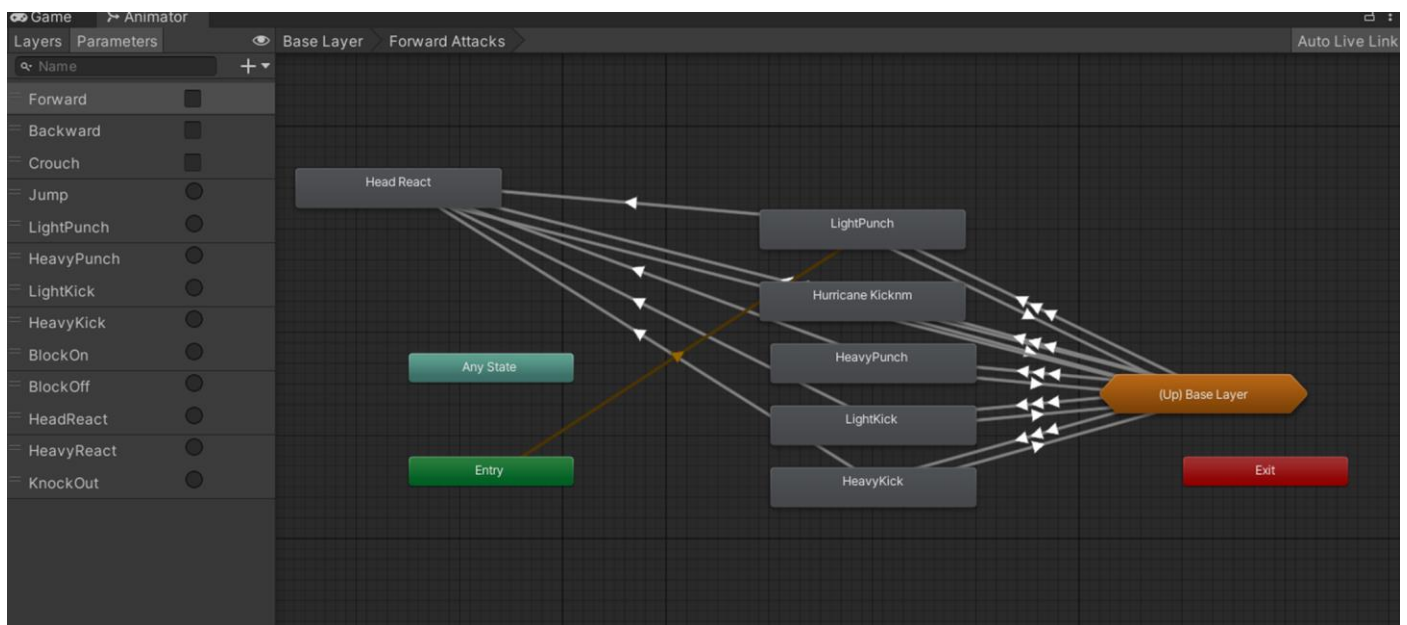
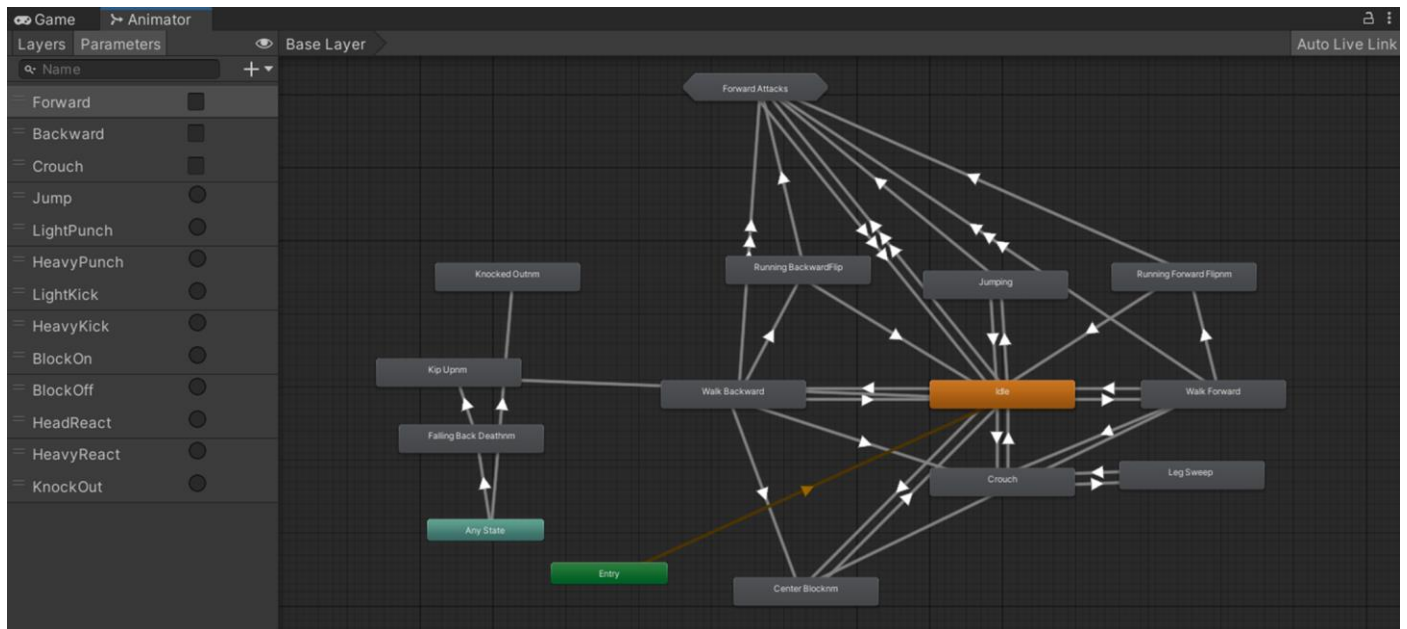
Regular updates and patches address player-reported issues, ensuring ongoing quality and player satisfaction.

Additional Components:

Animator:

Responsible for creating fluid and realistic character animations.

Enhances the visual appeal of the game, contributing to an immersive and cinematic gaming experience.

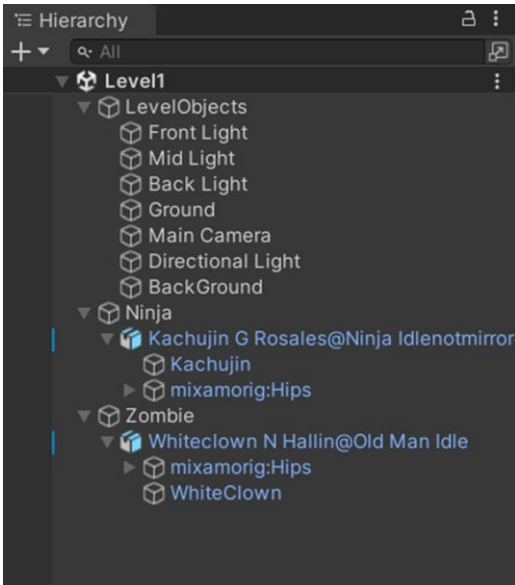


Scene Hierarchy:

Organizes game elements for efficient rendering and logical structuring of the gameplay

environment.

Facilitates seamless integration and maintenance of the game's immersive world.



Scripts:

Scripts can be accessed from GitHub. <https://github.com/Aysu-kursd/X-Fighters>

Potential of the Game:

X Fighters can support more playable characters with their unique movesets. Player vs AI mode is ready to be implemented, different strength levels for the AI opponent can be implemented too. Different battlegrounds can have different attributes and objects that affect the gameplay.

Conclusion:

In conclusion, X Fighters is a small-scale project that represents the collaborative efforts in order to venturing into the realm of game development. While it may not boast the complexity of commercial games, it stands as a testament to our dedication, creativity, and newfound skills. We hope it provides a glimpse into our passion for gaming and serves as a stepping stone for future projects.