Project Charter: Spaceship Game Development

Project Title

Spaceship Game Development

Project Overview

The Spaceship Game Development project aims to create an immersive 2D wave-based spaceship game using HTML5, CSS, and JavaScript. The game will feature a diverse set of environments, engaging gameplay mechanics, and various power-ups and enemies. The goal is to deliver a high-quality gaming experience that can be played on the web and later packaged as a desktop or mobile application.

Project Objectives

- Develop a 2D wave-based spaceship game with dynamic gameplay.
- Implement various game states including start, playing, game over, and boss fight.
- Incorporate different types of enemies and power-ups.
- Design and integrate a user interface for game controls and information display.
- Ensure the game is responsive and optimized for different screen sizes.

Scope

In-Scope:

- Design and development of game mechanics (spaceship movement, shooting, enemy behavior, power-ups).
- Creation and integration of game assets (images, sounds).
- Development of game states and transitions.
- Implementation of a scoring system and health management.
- Debugging and testing to ensure smooth gameplay.
- Deployment of the game on a web platform.

Out-of-Scope:

- Packaging the game as a desktop or mobile application (future phase).
- Adding multiplayer features.
- Extensive storyline or campaign mode.

Deliverables

- Functional 2D wave-based spaceship game.
- Documentation for game mechanics and codebase.
- User interface for game controls and HUD.
- Responsive design ensuring compatibility with various devices.
- Deployment on a web server for public access.

Milestones

1. **Project Kickoff:** Define project goals, scope, and team roles.
2. **Game Design:** Create game design document, define game mechanics, and develop initial prototypes.
3. **Asset Creation:** Develop and integrate visual and audio assets.
4. **Game Development:** Implement game mechanics, including spaceship movement, shooting, enemies, and power-ups.
5. **Testing and Debugging:** Conduct thorough testing to identify and fix bugs.
6. **Deployment:** Deploy the game on a web server.
7. **Project Review:** Collect feedback and make necessary improvements.

Project Team

- **Project Manager:** Evan Dayton
- **Lead Developer:** [Name]
- **Game Designer:** [Name]
- **Graphics Designer:** [Name]
- **QA Tester:** [Name]

Resources Required

- Development tools (IDE, version control systems).
- Graphics design software (Photoshop, Illustrator).
- Web hosting services for deployment.
- Testing devices (various screen sizes and operating systems).

Risks and Mitigation

- **Scope Creep:** Clearly define project scope and objectives; manage changes through a formal change control process.
- **Asset Delays:** Create a realistic timeline for asset creation; establish regular check-ins with the design team.
- **Technical Issues:** Conduct thorough testing at each development stage; maintain regular code reviews.
- **Resource Availability:** Ensure team members have the necessary tools and access; create a backup plan for key roles.

Assumptions

- All team members will have the required skills and access to necessary tools.
- Development will proceed according to the planned timeline without significant delays.
- There will be regular communication and collaboration among team members.

Approval

- **Project Sponsor:** [Name]
- **Project Manager:** Evan Dayton
- **Stakeholders:** [Names]