

STAR FIGHTER



Game Overview

Game Title: Star Fighter

Genre: Arcade, Space combat, Shoot em up

Target Audience: *Star Fighter* targets fans of classic arcade and retro shoot-'em-up games, appealing to players who enjoy fast reflex challenges, high-score chasing, and nostalgic space combat. It's designed for both casual players seeking quick sessions and enthusiasts craving skill-based, progressively intense gameplay.

Estimated Playtime 5-10 minutes

Elevator Pitch: *Star Fighter* thrusts players into fast-paced, vertical-scrolling space combat. Dodge relentless enemy fire, weave through swarms of hostile ships, and collect power-ups to upgrade weapons.

Core Loop: *Star Fighter* is a vertical-scrolling arcade shooter where players pilot a customizable spacecraft through waves of enemies. Players destroy hostile ships, dodge bullets, and collect power-ups that enhance weapons or shields. Each stage increases in speed and density, rewarding accuracy, survival, and upgrade strategy across progressively challenging galactic battlefields.

Gameplay Design

Core Mechanics

1. Powerups/Spacecraft augments
2. Destroying enemies to collect points
3. Manevoring to avoid bullets and enemies

Controls

1. Left/Right (a/d) (rightarrow/leftarrow)
2. Shoot (spacebar)(w)(uparrow)
3. Use powerup (e)(m)

Win Conditions

1. Defeat the level
2. Survive till the timer runs out

Lose Conditions

1. Run out of lives

Technical Plan

GameManager Uses

1. Level completion
2. Restarting a level
3. Controlling score
4. Initializing Game and Debug Tracking

Observer events

1. OnScoreChanged, OnPlayerDied, OnLevelComplete, OnGameOver, OnMenuOpened

State Machines

1. RollingState, IdleState,

Features to add

1. All observer events
2. RollingState for player dodging
3. IdleState
4. Background Changes

Scope & Timeline

Core Features

1. Three levels
2. 1 Boss Battle
3. At least three powerups
4. Enemy variety

Stretch Goals

1. Moving animations
2. New player sprite and enemy sprites
3. Simple Enemy AI

Art & Audio

Visual Style - Retro Arcade Style

Audio Needs

1. Background music
2. Player Movement Feedback sounds
3. Player Damaged Feedback sounds
4. Power up Sounds
5. Player Roll Sound

Simple UI mockup

Score top right, Player health might be small space fighters
bottom left, power ups bottom left, Dodge Roll stamina
bottom middle beneath player.