

Game Design Document: Pong

Game overview

Project background

The client ABC wants to have a simple pong game that can be played everywhere everytime.

High-level concept

Game name: Pong Now!

Target audience: All ages

Release date: Early 2024

Publisher: ABC

Pong is a classic arcade game that was first released in 1972. The game is a simple two-player game that involves hitting a ball back and forth across a screen using two paddles.

Theme, setting, visual style

Gameplay Mechanics

- The game is played on a single screen with a black background.
- The screen is divided into two halves by a white line that represents the "net."
- Each player controls a paddle that can be moved up and down along the screen's edge using a knob or button.
- The goal of the game is to score points by hitting the ball past the opponent's paddle.
- The game ends when one player reaches a predetermined score, typically 11 or 21 points.

Game Flow

- At the start of the game, the ball is served from the center of the screen.
- The ball moves back and forth across the screen, bouncing off the paddles and the edges of the screen.
- The speed of the ball gradually increases as the game progresses.
- If the ball hits the top or bottom of the screen, it will bounce back in the opposite direction.
- If the ball hits the edge of the screen behind one of the paddles, the opponent scores a point, and the ball is reset to the center of the screen for the next serve.
- If the ball hits the edge of the screen behind the other paddle, the game continues with the ball in play.

Art Style

- Pong has a simple, minimalist art style.

- The game features black and white graphics, with a white line representing the net and two white rectangles representing the paddles.
- The ball is typically a small white dot or circle.

Sound Design

- Pong has simple sound effects, such as a beep or a boop, to indicate when the ball hits a paddle or the edge of the screen.
- There may be additional sound effects to indicate when a point is scored or when the game ends.

Gameplay

User interface and feedback

[Explain user interface elements, such as the health bar, scoreboard, onscreen instructions, opening screen, closing screen options, and other notices players may receive during the game.]

Technical details

Engine

Unity 2021 LTS has been chosen due to its ease of use for AR development, the existence of a free version, its large list of features and the fact that it has the best target platform deploying capabilities.

Target platforms

Mobile device, Android and iOS