

Balloon Popper

Game-design document

1. Idea

Balloon Popper is a simple arcade game. The player must click on a balloon before it touches the ceiling. If a balloon touches the ceiling, its game over.

As the game progresses, balloons spawn and rise faster, increasing the difficulty.

The game includes:

- A 3D background with moving clouds
- A double-points coin that rewards the player with extra score multipliers
- A high score system to compete against previous runs

So, it's a game that's easy to understand for anyone but can get quite tricky!

2. Advice on IDE and Programming Language

For the development of Balloon Popper, we used Unity as our development environment and C# as our programming language.

Why Unity?

We chose Unity because we had previous experience with it. Also, it's the biggest game development environment so a lot of online support

Why C#?

C# is the main language for Unity. It is fully integrated and has a lot of learning resources and community help available online. That's why we chose it

3. Subtasks

- **Owain (OB):**
 - Game over screen
 - High score system
 - Background
 - Start menu
 - Assets
- **Daryl (DF):**
 - Double-points coin
 - Balloon spawn rate and colour
 - Moving clouds
 - Camera movement
 - Pop mechanic
 - Platform

4. Planning

We developed this game in 5 weeks. Each week focusing on a certain aspect.

WEEK	FOCUS	TASK COMPLETED	ASSIGNED TO
1	Setup & Core Mechanics	Unity project setup, GitHub repo, pop mechanic, balloon spawn rate & colour	Daryl
2	Game Flow & Assets	Start menu, platform, assets, pop mechanic (refinement)	Owain and Daryl
3	Scoring & Visuals	High score system, double-points coin, background, camera movement, moving clouds	Owain and Daryl
4	Polish & Finalization	Game over screen, bug fixing, and final adjustments for all features	Owain and Daryl
5	Review & Completion	All tasks moved to "Done," final review, and project finalization	Owain and Daryl