

# Programming 2: Prototype Pitch/Brief

Name: Joseph O'Shea

Student Number: C23382866

Worth: 10%

Due: 26/11/24 10AM

## Paper Plane Simulator



Itch: <https://dgeoe.itch.io/paper-plane-prototype>

Git Project Repo: <https://github.com/Dgeoe/Programming2-Assignments>

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## Elevator Pitch

**Paper Plane Simulator** is an arcade flight game set in a stylized school campus, blending zen-like exploration with action-packed events. Players pilot a customizable paper plane through an open world, engaging in races, dogfights, and high-score challenges. The game is 3D and has a cartoon-like cell-shaded art style.

## Why?

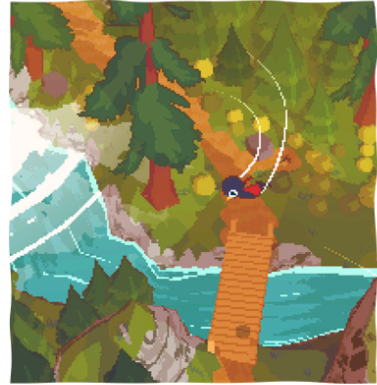
I noticed a gap in the market where there are tons of hard-core racing simulators and plenty of more arcade counterparts for those who enjoy the broad mechanics but want a less challenging more gamified experience. However, this can not be seen in the flight simulator genre where there are no notable arcade-based partners for them.

## Why?

Racing	Arcade racing	Flight Simulators	Arcade flight games
 	 	 	

This is despite the fact that arcade flight and gliding have become greatly adored secondary additions to other games such as Spiderman 2 (2023) and Batman Arkham Knight (2015).

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## Flight as a Gameplay Mechanic

I am heavily inspired by the core gameplay loop of the arcade racing game Burnout Paradise, where you explore an open area at your leisure and can engage in side activities (such as races) whenever you choose to. My game would then set its core around non-linear exploration and utility-gated progression.

### Game Story

You pilot a paper plane crafted by a mischievous child during class. Launched out of a classroom window, it embarks on a whimsical journey across a sprawling school campus. The world is vibrant and full of challenges, designed for mindless exploration or competitive mastery.

### Gameplay/Rules

- **Core Loop:** Free-roam in an open area for zen exploration. Engage in events like:
  - **Races:** Compete against AI paper planes.
  - **Dogfights:** Battle enemy birds.
  - **High-Score Minigames:** Perform tricks, achieve targets, etc.
- **Rules:** Avoid crashes to maintain performance. Score points for completing events and exploring.

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## **Core Mechanic**

Flight simulation with arcade controls for simplicity. Unique plane folds/designs unlock new abilities, enabling customization and personal expression.

## **Progression**

Unlock new folds (plane designs) and colors by exploring or completing events. Track progress via personal records like fastest times and high scores.

## **Economy**

Light progression is tied to exploration and events. Reward players with fold designs and cosmetic plane upgrades.

## **Graded Elements**

- **Physics (10%)**

Realistic yet simple flight physics to mimic paper plane motion. Crash physics deforms the plane into crumpled paper upon impact.

- **Animation (10%)**

- Intro animation: A child throws the plane out the window.
- Crumpling animations: The plane reacts dynamically to crash locations.

- **Artificial Intelligence (10%)**

- Enemy AI for dogfights with birds.
- Racing AI for competitive events.
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- **Game Data (10%)**

Store and display player records (fastest race times, highest scores). Notify players when breaking previous records.

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- **Shaders (10%)**

Cel-shaded comic/toon style for a polished, playful aesthetic.