Game Design Document: **"Assault on Mosul"**

A cute platformer with a strangely political name

Notes:
- Please play the game *before* reading this!
- This document has been made <u>before</u> coding the game. I find it a good exercise, so if you never did the same, I really recommand you give it a try!

Gameplay

Overview

The player swaps between two <u>collaborating</u> heroes:
- The **soldier**: controls like in a platformer, moving and jumping (controls: LEFT RIGHT + UP to jump + SPACE to switch)
- The **air support**: drops bomb from the top of the screen (controls: LEFT RIGHT + DOWN to drop a bomb + SPACE to switch)

The goal is for the soldier to reach the end of each level, with the help of the air support.

Dropping bombs

By dropping bombs, the air support can destroy anything on-screen except the ground. The bomb <u>only destroys</u> the first thing it came in contact with. In the later levels, wind can affect the trajectory of the bombs.

Destructible elements are:
- Background elements/Platforms, which can either be obstacles or useful for the soldier.
- The soldier itself
- Civilians, which just stand somewhere doing nothing
- Enemies, which also just stand there doing nothing, are visually barely recognizable from civilians, but *explode* when you get too close, destroying everything in range and the soldier in particular.

When the soldier gets stuck or killed, the player can at anytime restart the level.

Score

The score is simply the sum of all civilians saved. When the soldier completes a level, before displaying the final level score, each enemy still alive automatically explodes, potentially killing civilians.

All level scores add up to eventually make the Game Over score.

Graphics

Reuse the cartoony graphics from the logo! The "news-oriented"/"political" aspect of the game subtly lies in its gameplay only.

- Square is the soldier (always red). It explodes into red clouds.
- Fish is the air support (always red)
- Blob is both the civilians and the enemies, differing only by what they hold in their raised arm (varying tints, never red). They explode into clouds of the same tint.
- Destructible background is made of various polygonal, white shapes (grey if they are floating platforms, like the ground). They explode into clouds of the same tint.
- The end of the level is a two-sprite animated black flag

Iterations

Minimal version

- Simple title screen letting the player start the game
- Implement a floating platform of a single shape (resizable square)
- Implement the soldier (movement)
- Implement the air support (movement + dropping bombs makes stuff disappear)
- Let the player swap between the heroes
- Level completion
- Level restart button

Decent version

- Implement platforms affected by gravity
- Add more platform shapes
- Make the camera follow the currently selected hero
- Have two levels

Cool version

- Implement civilians (random color within a list, nothing or something non-dangerous in-hand)

- Implement enemies (random color within a list, weapon in hand, explodes when close to the soldier or air support)
- Score keeping (global score indicator + current level indicator)
- Level end animation (succintly show the addition of the current level score to the global one)
- Show best global score on main menu
- Have three levels

Awesome version

- Cloud animations when something is destroyed (~10 clouds are generated with the same color as its origin object, and move in a random speed/direction)
- Wind indicator, affects bomb movement (wind value is hardcoded by level)
- Particles in the background are affected by the wind
- Level end animation: show enemies exploding if they're not killed
- Persist best global score

Level-design elements

- Background elements with weird shapes must be destroyed in a specific order to let the player complete the level
- Enemy hides between lots of civilians, making it hard for the air support to pick it out
- An enemy cannot be killed without destroying a necessary platform first. The soldier must nail difficult platforming to get past him.
- Final level has an enemy on a platform, in range for destroying the air support if it gets too close. Another enemy blocks the path below but can be killed thanks to the wind going right.
- Destroy the top of a building, then the enemies in it, then the walls to go through