

1. A detailed explanation of your game design process, justifying the choices made. **(5 marks)**

When the user clicks, the bird moves up and then if the user doesn't click, the bird goes down. The bird collects apple power ups and a score is given on the top left of how many apples have been eaten. If the bird collides with a pipe, the game over screen is shown and the player loses. After a few seconds when the game over screen shows, the pipes and apples no longer spawn. The player also loses if the bird hits the ground.

2. A detailed explanation of your game development process, justifying the game mechanics you implemented. **(5 marks)**

At the beginning, I added a couple of pipes and apples. But then I realized that if we want to make the game endless, the pipes should be spawning. I then added a script to make the pipes move and another script to keep spawning new pipes. I did the same for the apples to get apples and pipes at almost random locations each time. I had to disable the scroller script because the spawning + moving pipes weren't working with the scroller script. I added some text to count the number of apples eaten. I added some BG music and sounds as well.

3. A critical self-reflection on your experience of games development. What worked well? What did you struggle with? **(10 marks)**

The spawning of pipes and adding the apple power up was the most difficult part because it wouldn't work properly. I found the apple sprite from OpenGameArt. I removed the background of the sprite using a website, but I think there's a tool in Unity that you can use to edit and add downloaded sprites. I mainly used what we had learnt in the lecture, the uploaded videos on the MMU website and a couple of YouTube videos to see how to spawn the pipes and use power ups. I liked choosing a sprite to use as a power up. I also liked playing the game as it was the first time I played a game I had made.

4. A critical self-reflection on any future improvements you would make on your game if you had the time. Consider what design changes could improve the aesthetics? What game mechanics could improve the game experience? **(10 marks)**

I tried adding a restart button so the scene would load again but the button wouldn't show up so that would be interesting to add later. I could also have a start menu which could say the name of the game, have a start button and some simple instructions. The game is kind of boring because the pipes are moving at a slow rate and you can easily predict where they will be, it would be nice to have a power up to speed the game up. Sometimes the apples spawn in random positions so they're not always possible to collect. There are a couple of things in the project that I could have deleted. For example, I am no longer using the scrolling script, but I just disabled it, I could have deleted it instead.

Game file:

<https://drive.google.com/file/d/19rRLH7p2lN7KK5o3LfcUa38QUwO6nzs/view?usp=sharing>

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