**CSc 102 Project Proposal Guidelines**

The proposal (1–2 pages) should include the following:

Group name: The Birdies

Group members: Vela Mdluli, Libolethu Makatala, Lutho Velapi, Emmanuel Phiri.

Group Mentor: Augustine Mochoeneng

Project title: Flappy bird creations

Project page: [nkosinathip/birdies: the creation of a better version of flappy bird. (github.com)](https://github.com/nkosinathip/birdies)

1. “Background and Motivation”, where you state its rules, give a brief (half page) overview of the history of the game, and the motivation for implementing a specific version of it.

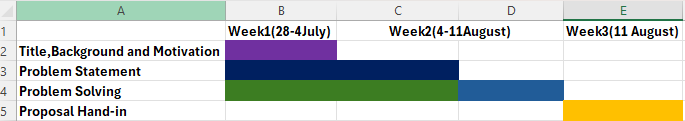
Flappy Bird is an arcade game that was designed in 2013 by programmer Dong Nguyen who made Flappy Bird with a goal in mind to make a game that was easy to play “while on the move”. Since Flappy Bird is new compared to other arcade games there is only one variation of the game, which is the original version. This variation is played with the player controlling a small circular bird , by tapping on the space button or on the screen itself the player must attempt to fly and avoid the green pipes. The player loses if they hit on the green pipes, however, in this game the player doesn’t compete with another player in Flappy Bird, the player only wins by beating himself (their high score), which increases after passing each green pipe.

1. A clear “Problem Statement” that defines the problem you intend to solve; that is the work that you plan to do for this project.

The objective of flappy bird is to tap the screen in order to project the bird upward the faster you tap the higher you go. The main reason to project the bird upward is to make sure you stay in between the upcoming poles cause if you hit the poles, it is game over. The more poles you pass the more points you earn and each pole is one point. The aim of this version of flappy bird is to give the flappy bird colour features, more designs and try adding difficulty levels. The complexity of the game might be quite a bit high, since there are plans of adding more features, more designs, random colours in the whole landscape and fluent coordination throughout the game.

1. A clear “Approach” that describes how you will go about solving this problem in the form of milestones.

A suggested approach to resolving the complexities that come with coding flappy bird would be to split up the tasks according to each team member’s skill set or strengths as well as split up these challenges in different milestones/time frames. One member could be designing and drawing the features of the game, which include the bird itself, the background and the pole as well. They could use YouTube as a guide on how to draw said features, add exciting colours as well. This process should run during the design and coding of the game itself and how it would operate. This task would then be taken up by some of the members as they research on how to increase the difficulty of the game as the user keeps playing, this should span over the next few weeks. It would be in unison that we as a group research on how to design the game and increase difficulty of the game as well as whatever software or IDE to user with Java to create and design the game and its features, with that we put our ideas together and the main coder then implements our research into the code. On a general scale we as a group would turn to YouTube for help on the small issues we have or even as inspiration on how we can improve the game that was designed, as well as seek help from our tutor for help and guidance in areas we may have trouble in. we will be utilising GitHub to hold each other accounatble on our deadlines as well as to keep track of our progress as a group.

1. A predicted “Timeline” consisting of the above milestones with dates. Research how to represent this graphically as a Gantt chart or in another easy to read way such as a table.

The representation of the milestones achieved thus far using a Gantt chart

1. Include a list of at least three references at the end of your proposal and cite all of them at the correct place in the proposal.

**Reference List**

Basit Ali’s Trainings,2023. *Drawing the bird - How to make Flappy Birds [Game Graphics].* [video] Available at: [Drawing the bird - How to make Flappy Birds [Game Graphics] - YouTube](https://www.youtube.com/watch?v=_6bxBElb7s4) [Accessed 9 August 2024].

Create & Learn Team, 2024. *How to make a Flaapy Bird in Scratch.* [Online]   
Available at: https://www.create-learn.us/blog/how-to-make-flappy-bird-in-scratch/  
[Accessed 9 August 2024].

FlappyBird, 2024. *FlappyBird.* [Online]   
Available at: https://flappy-bird.co/  
[Accessed 8 August 2024].

Rigney, R., 2014. *Inside the Brief Life and Untimely Death of Flappy Bird.* [Online]   
Available at: https://www.wired.com/2014/02/flappy-bird/  
[Accessed 7 August 2024]

wikiHow Tech, 2021. *How to Play Flappy Bird.* [Online]   
Available at: https://www.wikihow.tech/Play-Flappy-Bird  
[Accessed 8 August 2024].