

Assignment 1: Flying Ostrich

1. INTRODUCTION

Flappy Bird was created by a young Vietnamese game artist and programmer (kind of just like you) for the iPhone in 2013, and by 2014 was earning him \$50000 a day from in-app advertising and sales! The game makes use of a single input mechanic, where the player can cause the bird to “flap” a short height. The bird moves to the side continuously and the map has obstacles of random height that must be avoided. It is natural to the player to let the bird fall to drop beneath obstacles, and to rapidly flap the player over obstacles. The further you get, the higher your score. Play it yourself now at: <https://flappybird.io/>. What would you change to make it better? What about “Sinking Fish” or “American Wall Hopper”?

In this assignment you are required to develop a game with a similar mechanic to Flappy Bird. Think of it as, at minimum, a clone - where the word clone is used loosely. Please attempt to add your own touches to the game in terms of mechanics, game feel and content. Experiment with new things, but if you are not happy then remove your changes. It is far better to have a simple and playable game, than a complex but half-broken one that is hardly playable.

As always, you must create all of your own assets for the assignment (textures, shaders, effects, etc.). You may not copy-paste assets, code or anything else, for example. Create your own assets. You may only use external free fonts, music and sound effects, provided you give appropriate credit. You are welcome to follow tutorials and guides that you find, but it is strongly recommended that you do not simply submit the outcome of these (plagiarism). Go ahead and follow a tutorial, use their assets and make a great game; then delete that and start again and work from memory. That is how you become a great game developer.

2. ASSESSMENT

Your game will be assessed by a lecturer or tutor in the lab on the day of submission (see the CBO) or before, if you wish. A copy of the assessment rubric is available on Sakai - take note of the outcome weightings. You will be required to demonstrate your game and walk the assessor through your code and other implementation details in a concise manner if requested. The assessor will play the game themselves to get a feel for it. You may be required to answer questions about your implementation and design decisions.

The game must be started from the beginning (the main menu, if you feel one is necessary for the game) and if there is a bug that doesn't allow the game to be played you will be penalised. This is an individual project and as always, plagiarism is a severely punishable offence.

There is no report due for this assignment, however, it is suggested you document your design process for future reference. Create flow diagrams for game mechanics, concept art, calculations for game balance, etc.

Remember, this is a rapid prototype and not a publishable AAA game. Don't waste time on frivolous features - focus on the core game mechanic and make it fun, if you can.



PRACTICAL ASSIGNMENT ASSESSMENT FORM

Student Name:

Student Number:

Final Mark:

(NB: Late?)

	Weight	Unacceptable	Poor	Acceptable	Good	Excellent	Brief description of outcome	Justification for outcome rating if NOT rated <i>Acceptable</i>
Game Mechanics & Dynamics	30%						Functionality, reliability, effectiveness, balance. Evidence of insight, originality or attention to detail.	
Game Feel	20%						Player engagement, experience, satisfaction, polish. Evidence of insight, originality or attention to detail.	
Communication of Game Assets	20%						Appropriateness and effectiveness of audio/visual design and aesthetics (sound and music, textures, models, lighting, effects, etc.). Evidence of insight, originality or attention to detail.	
Overall Integration	30%						Overall flow and polish of the application. Suitable, working user interface. Evidence of understanding of implementation.	

Rating	General Interpretation
Unacceptable	No evidence provided; invalid/irrelevant approach, method, execution; completely flawed.
Poor	One or more major flaws, otherwise complete; one or more components very poor.
Acceptable	No more than minor flaws, otherwise complete; no distinguishing features.
Good	Shows insight; some distinguishing feature(s).
Excellent	Exceptional insight and multiple distinguishing features.
All outcomes are weighted equally.	
If any outcome is rated Unacceptable, then the overall mark will be capped at 40%.	

Late Submission
(Penalty on Final Mark)

Submitted deliverables late?

Daily/late penalty: -5%

After 5 days: -100%

Penalty:

See School policy on late submissions.

Mark Adjustment (Examiners Discretion) $\pm 3\%$

Examiner's Overall Comments:		Date:	
		Signature:	