



CS4478
GAME PROGRAMMING
DR. SABAH MOHAMMED
DEPARTMENT OF COMPUTER SCIENCE
PROJECT 1: YOUR GAME IN HAXEFLIXEL (15 MARKS = 100 POINTS)



HaxeFlixel

You are going to do a class HaxeFlixel project. The project's concept, design, and implementation are all up to you. This is a group project meaning that you have to discuss and work with your assigned team (See D2L to know your group). When choosing an idea for a project, make sure to keep two things in mind: the length of this project and your skill level as a HaxeFlixel developer. The main issues you will have to deal with when implementing a game is:

- How to represent the game objects (e.g. board, pieces and cards)
- How to represent players
- How to control the rules and turn-taking of the game

Each group will focus on one type of games:

Group 1: Board Game

Group 2: Memory Game

Group 3: Platformer Game

Group 4: First-Person Shooter Game

Group 5: Asteroid-Shooting Game

Project Requirements

Your game involves a real-time audio-visual experience in some sort of 2-D world. The user must be able to control at least some aspects of the game with a controller, and there must be some use of sound, both in the background and in response to some action in your game. The user should have control over which display devices, resolution and input devices are used at any time during the game. Your game must not be copied from other sources.

Project Milestones

- ☒ **The Game Package** [up to **75 Points**] = 10% (All the hex source files + Readme.pdf including screen shots + Game Rules + Zip for the complete project) to be uploaded to D2L
- ☒ **The Presentation** [up to **25 Points**] = 5% PPT + Game Video for 15 min to be presented in Class (Videos + PPT to D2L)

Grading Criteria

Each game will be evaluated in six categories. The maximum number of points earned for each category is listed after that category's title. The maximum possible points for your **Graded Project 1 are 80 points.**

Concept : Is this a clever idea for a game? Will it appeal to a viable market? While it's okay for a game to be serious or silly, is it *too* serious or silly? It is offensive (that's bad)?

Ergonomics : Does this game accommodate lazy players? Do players have to reach too far? Do they have to constantly fiddle with the pieces or are they easily and smoothly manipulated? Do they have to keep looking up information in the rules (that should have been provided on Play Aid sheets)? Has the designer avoided "player discomfort and irritation" factors such as these during play?

Ease of Setup, Ease of Play, and Clarity of Victory Conditions : Does the game set up quickly and easily? Is the game's Sequence of Play clearly explained and easy to follow? Do the rules clearly explain how to win?

Physical Quality : How do the components look and feel? Is the game physically attractive or repulsive? Is it sturdy? Are the components neat and legible or sloppy and hard to read? Has color and art been used properly and efficiently to improve the game's utility and better "tell its story?"

Rules : The rules are the heart of the game. Specifically, do they:

Start with a description of what the game is about

Then introduce the various game components to the player (using illustrations and brief descriptions)

Then (because this is a *simple* game) give the game's Setup and Victory Conditions

Then outline the game's Sequence of Play

Then present the rules in Sequence of Play order

And finally included any additional information (such as the game's credits) at the end

If the rules are long, do they include a Table of Contents at the beginning? Are necessary illustrations and examples of play included? What is the *weight* of the rules? How *clear* are they? [And, optionally, for *added value*, do the rules include any Designer's Notes, Optional Rules, Variants, and / or Additional Scenarios or Levels?]

Correctness and Fun Factor: **Correctness means that it run and perform as stated in the concept document.** The fun factor is the personality of the game. This is a subjective evaluation based upon how much fun we had with the game and our overall estimation of how successfully it achieved the design goals that we perceived for it. Did it follow the principles of game design from all the lessons? Did the designer effectively *communicate* the game to us. Does the game feel well developed and polished or like it still needs a lot of work?

What You're Expected to Hand In and Present

☒ **The Game Package-Required** this includes all the game programs and resources as well as the concept document and the game rules (Only **PDF** that also contain ScreenShots). It should be zipped (**ZIP** and not RAR) in one file and submitted to D2L. Each group member should submit the same package with simple note (notepad.txt) file describing his role in this part of the project.

☒ **The Game Presentation-Required** this includes 5 min presentation at class using PPT Slides. Describing your game, how to programme it and play it. Each group member should submit the same package with simple note (notepad.txt) file describing his role in this part of the project.

Grading Criteria

Base Grade					
Categories	A	B	C	D	F
Programming (HaxeFlixel)	30-33	25	20	15	<=15
Physics, Arts, Collision Detection and Scoring	30-33	25	20	15	<=15
Documentation Efforts (ReadMe) + Presentation	30-33	25	20	15	<=15
Total	0–100				
Adjustments					
Game has minor technical flaw(s)	–5				
Game does not work	–50				
Failed to turn-in resources	–20				
Missed deadline	–30/hr				
Evaluation Key Criteria					
A	Professional quality work.				
B	Above average student work. Goes above and beyond what's required.				
C	Average student work. Meets the minimum requirements of the project.				
D	Below average work. Fails to meet minimum standard.				
F	Incomplete or very poor.				

Note: Respecting the student behaviour code is highly appreciated:

<https://www.lakeheadu.ca/faculty-and-staff/policies/student-related/code-of-student-behaviour-and-disciplinary-procedures>