HW 6: I Used AI to Make Flappy Bird

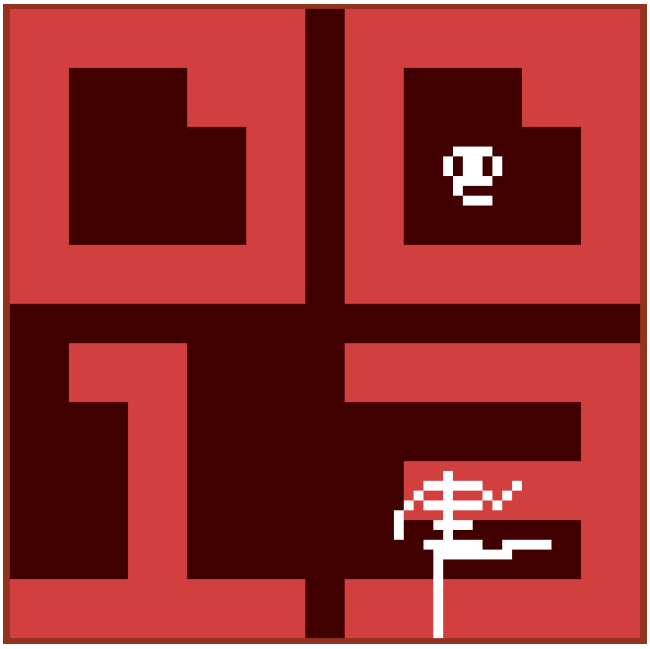
Shortly after LLM-based chatbots using GPT and LaMDA gained widespread popularity, YouTube saw the dramatic appearance of many similarly themed videos from game engine users, such as "I Used AI to make Flappy Bird"...

https://www.youtube.com/watch?v=RsSyow2V-UY

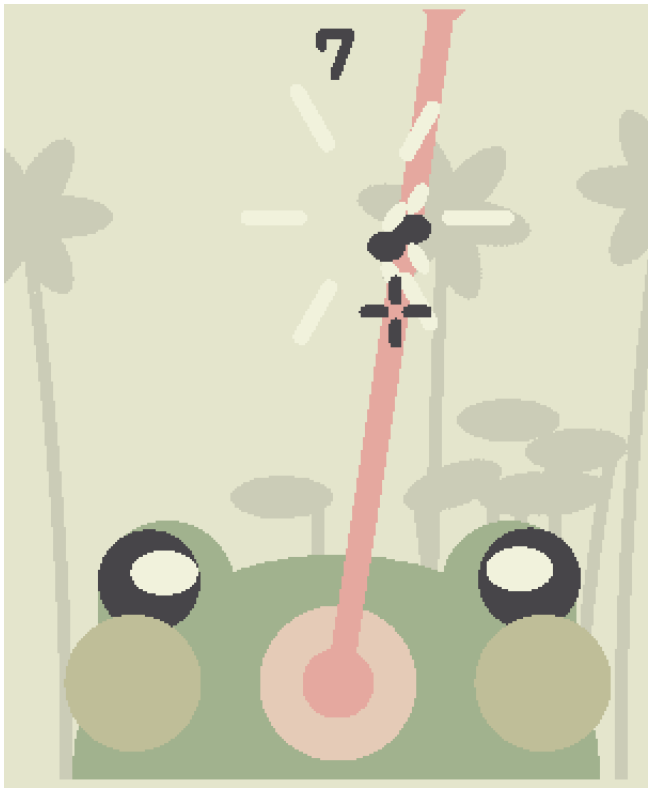
This is actually something that caught my attention because none of these videos seemed to demonstrate an AI that could just plop out even a simplistic game while many voices in social and traditional media were saying AIs were threatening software developer jobs. This is what led me to start testing these AIs myself and quickly determine they are very powerful tools in the hands of developers (even more so for experienced developers and experienced "AI-ers").

To pay homage to this and steer you in the direction of using these AIs as tools that can direct you, generate assets, explain code, tell you how to do something in an unfamiliar software, etc, our last assignment will be a reflection of all this.

I want each team (or individual) to remake one of two games (you pick) with your choice of using either the Godot game engine or Python 3 using the PyGame library. Don't worry if you don't know how to use either… you can always ask your AI for help (eg, ChatGPT seems quite familiar with the version 3 series of Godot, which is still the long term service [LTS] version). The two games to choose from are "Creepy-Uppy" and "Feed Frog". You can see and play both in most browsers at https://akzidenz.itch.io/creepy-uppy and https://ee-wick.itch.io/feedfrog, respectively.



Creepy-Uppy



Feed Frog

Watch the "I Used AI to Make Flappy Bird" video above, and you'll see the resulting game is NOT a great clone of Flappy Bird. It just has many of the major elements and has used generative AI (such as image, sound, and music generators) to put something together we can recognize as "like" Flappy Bird. That's all I'm looking for here, too. Do NOT stress out over cloning either of these games or making them perfect… have fun. Work incrementally and target important aspects of the games first. Your grade will NOT suffer because the game is not perfect or not really that "gamey" so long as you clearly address as many of the main elements as you can and write about what you used the AIs for (more about that later). For example, the frog tongue could just be a line that shows up full length all at once and stays for half a second before disappearing… the flies could vanish as soon as they hit the tongue, even. Maybe the Creepy-Uppy splash screen just goes away to the main game instead of animating it with that cool stretchy effect, etc.

If you are able, add your own ideas to the games, or better yet, ask an AI what a good/fun idea to improve the game would be and try to integrate that if you have time. Remember, these don't have to be great… I want to see you're really trying stuff, even if it comes out clunky… just let me know about it all in your review document.

I want you to write code and do design yourself, but I want you to leverage the AI's whenever and however it can benefit you. Use the AIs for almost everything if you want the challenge or to see what goofy thing will come out of it, but I want you to explore these as just tools that help you. Please try using AIs to generate content/assets such as bitmap fonts, sound effects, background music, pixel art, etc. As you find freely usable AIs for this, post about them in the discussion forum.

You do NOT need to log your AI session for this assignment. Instead, Prepare a review document describing what AI tools you used, what worked well and what didn't, and for a BIG finale, end with a paragraph or two describing how/whether you think you might use this technology in future work and you top two or three tips for getting the most out of them in your development toolchain. Good luck and have fun.