Project: An Endless Game

With an endless game, instead of a game designer laying out predefined levels, the objects in the scene are generated on-the-fly. You will create a basic endless game in the style and setting of your choice. Your game will feature a simple player character (or vehicle) and have obstacles/hazards, and collectibles that are generated programmatically. The longer the player lasts, the more points they get.

If you need some inspiration, here are some examples of styles of endless games. These are just examples, you are welcome to build whatever you want.

Line Rider: https://carmine.itch.io/example-line-rider
Dodge Things: https://carmine.itch.io/example-dodge-things
Dot-Climb: https://carmine.itch.io/example-dot-climb

We are going to make a Flappy Bird clone in class, so **do not make a Flappy Bird style game** as a project.

What are the requirements for the project?

The following are **required** to earn points for the project:

Menu Scene (5%)
- Title of the game
- Team Name and the names and Pace email of the members on the team.
- Press space to start.

Character (20%)
- Some sort of player character and a form of interaction (clicking the mouse, keyboard, tapping, etc.)

Game Scene (70%)
- Generate obstacles on-the-fly using prefabs.
- Generate some sort of collectible (such as a coin, star, etc.) on-the-fly using prefabs.
- The player should get points in some way. This could be a point for every second they last, or a point for passing an obstacle. You could give extra points if the player gets a collectible.
- Hitting an obstacle should end the game.
- Background music and at least one sound effect.
- The game must be **endless**. Do not simply make a very long level.

Game Over (5%)
- Show the words "Game Over" and press space to return to the main menu.

Any tips on how to get started or approach this project?

The secret is that the player is actually standing still and the obstacles and collectibles move at the player.

If I want to go that extra distance, what are some things I can add to my game?

While **not required**, here are some ideas for things to add to your game:
- Increase the difficulty the longer the player lasts (speed up, more obstacles).
- Add additional sound effects and music.
- Whatever else you can think of!

Help, I'm stuck!

There are a lot of common Problems and Questions. **Watch this playlist** of videos it might help.
https://www.youtube.com/playlist?list=PL_QmvmIfJvh0piepSNTSavA---U4ndCV0

Still need help? **Contact your mentor!** They are there to help you.

How do I submit my work?

Your project must compile! Non-compiling projects will get a 0. When you are done, you must upload a .zip of your project folder to the **Assignments** area in **Blackboard**. **After you submit your project,** there will be a discussion board post where you will post a link to itch.io and project reflection.

Do not share your code or your links with anyone until after the project is completed. All code must be your own, any plagiarism will result in a grade of 0.

Only one of your team members needs to submit the project. However, **all team members** need to post to the discussion board.

You can not submit projects late!

Due by 11:59pm means your project was successfully uploaded by that time. Start uploading your project at least an hour before. If there are any issues with uploading your project, you must **email me before the due date**. Email cguida@pace.edu from your @pace.edu email address. I will not accept any other form of contact.