

PYCK PROJECT ABSTRACT

SPACEREX

DESCRIPTION

As the name itself gives it all, we are making a game with the theme of space with action also maybe a bit of a small storyline. With a 2D control space the user's space shuttle will have 2 degrees of freedom which are forward and backward and angular, same goes for the enemies. "Action without bullets is just not Action", so obviously having a variety of bullets both to the user and enemy shuttles. Also a constant stream of Asteroids which could be a GAME OVER if crashed to. The most interesting part for us would be that here the enemy shuttles would be a little smart, that is, they could use the asteroid as a shield or increase their speed for a small duration to escape something or many more possibilities.

LIBRARIES

So currently we will be only using Pygame or Turtle, random, time and some more libraries if needed eventually.

WALK-THROUGH

So the base of the game would be based on Pygame, obviously, So the player would be controlled using arrows by, if pressed, types of syntax other than movement various other controls would be. There's gonna be a main While True Loop for the running of the game until QUIT. This will include all movements of each component Conditions of collisions or creation or anything else. We will be using self designed graphics for each component. The enemies would be having randomly initiated motion, which would eventually be driven by the coordinates and direction of motion of the player's space shuttle. There would be many more interesting features along the way.

TIMELINE

1st week : We'll be completing the base of the game, which includes creating all objects, assigning motion to each, deciding collision conditions and some other stuff which will be the base of the game.

2nd week : This time would be of extra features, that is, various levels, more types of enemies, bullets, more other creative stuff, basically giving a final perfect creative and functional touch.

EXTRA TO LEARN

A much like a short idea of many everyday used libraries like time random and many other libraries. Also maybe graphical related stuff.

MOTIVATION

We have decided to do our project on the idea of game making, considering we don't have prior knowledge of machine learning, AI etc., but we have a good exposure of game making, due to CS101. The thrill of creating a game, which has to do with speed and subtlety of the player, is itself a good reason to work on and develop it enthusiastically. I believe this project will keep us hooked and will be sufficient to make good use of this new language we have learnt. Also, this will help us develop on the professional front, by knowing how developers go about doing their work. Additionally, it would give us exposure to design and graphic elements too.

REFERENCES

<https://realpython.com/pygame-a-primer/>
<https://www.programiz.com/python-programming/modules/random>
<https://realpython.com/python-time-module/>
<https://docs.python.org/3/library/turtle.html>

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