

Sharp Shooter

Team : Binary Boys

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Description:

Ever played mini-militia? I bet my bottom dollar that you have. Keeping it short, this project is our attempt at making a simple yet enjoyable desktop version of this mean RG machine. Our project is a multiplayer shooting-based game implemented in the python programming language wherein the players have to shoot their opponents in the battle for ultimate supremacy!

Technical Aspects:

As mentioned above our project is implemented in python and with a lion's share of the success going to pygame, which is a set of python modules designed especially for creating multimedia games in python. Pygame is free, highly portable and runs on nearly every operating system. Along with this gaming module we used other standard python modules like 'sys', 'random', 'time', etc. UI apart the other main aspect in this project was enabling multiplayer access. We initially planned to use socket programming to implement this, but we didn't taste much success. After more researching, we realised that Python has its very own socket module which can be used in general for creating sockets and connecting the server to the client. There is also a library that goes by the name of 'Twisted' to help you write network code. After many experiments and after playing around a bit with these modules and libraries, we finally used PodSixNet, a networking library designed especially for multiplayer game networking. This library has lots of inbuilt functions and callback methods that send data to the server. No more waiting for buffers and checking sockets for waiting data, just a few magic lines and the library handles everything for you!

Theory Involved:

PodSixNet has a nice really nice documentation on GitHub where you will also find the source code developed by Chris McCormick. Download the files and place the PodSixNet

folder in the same directory as your python code. Below is the GitHub link for the above along with a nice tutorial.

<https://github.com/chr15m/PodSixNet>

<https://www.raywenderlich.com/46843/multiplayer-game-programming-for-teens-with-python-part-2>

Learning python may be considered simpler as to learning C++ and Java. Yet you could do with a few handy tutorials and courses. Below is a course 'An introduction to Interactive programming in python' by Rice University... A useful resource for programmers with no prior knowledge of programming in python. The course is split into two half courses of four and five weeks each. (Note: this course does not implement the pygame module) Links are as follows:

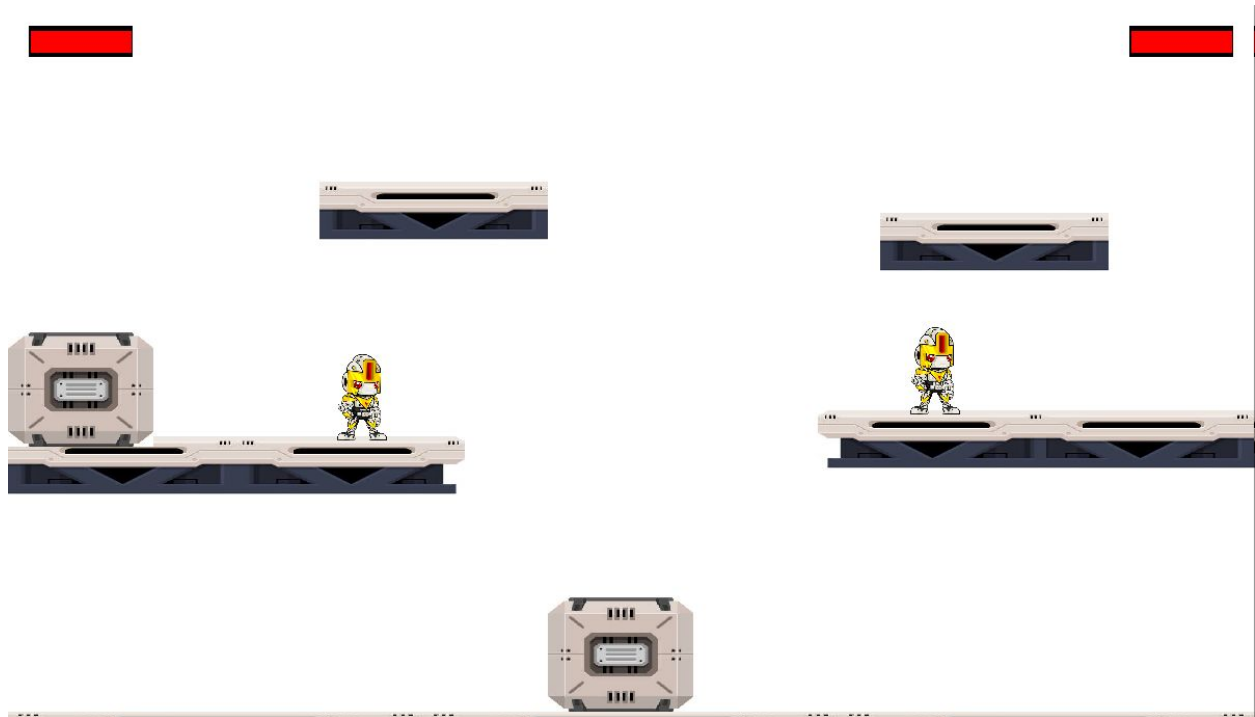
<https://www.coursera.org/learn/interactive-python-1>

<https://www.coursera.org/learn/interactive-python-2>

As these courses use their own graphics module 'simplegui' a nice resource for learning how to use the pygame module is the book 'Making games with python and pygame' by Al Sweigart. It's a nice book which assumes you have prior knowledge of python programming and helps you to make simple games with the pygame module. Have a look at the link below:

<https://inventwithpython.com/makinggames.pdf>

Set, ready....shoot!!



We downloaded the background sound from the below sites(downloaded it from the first link but the others are great resources too)

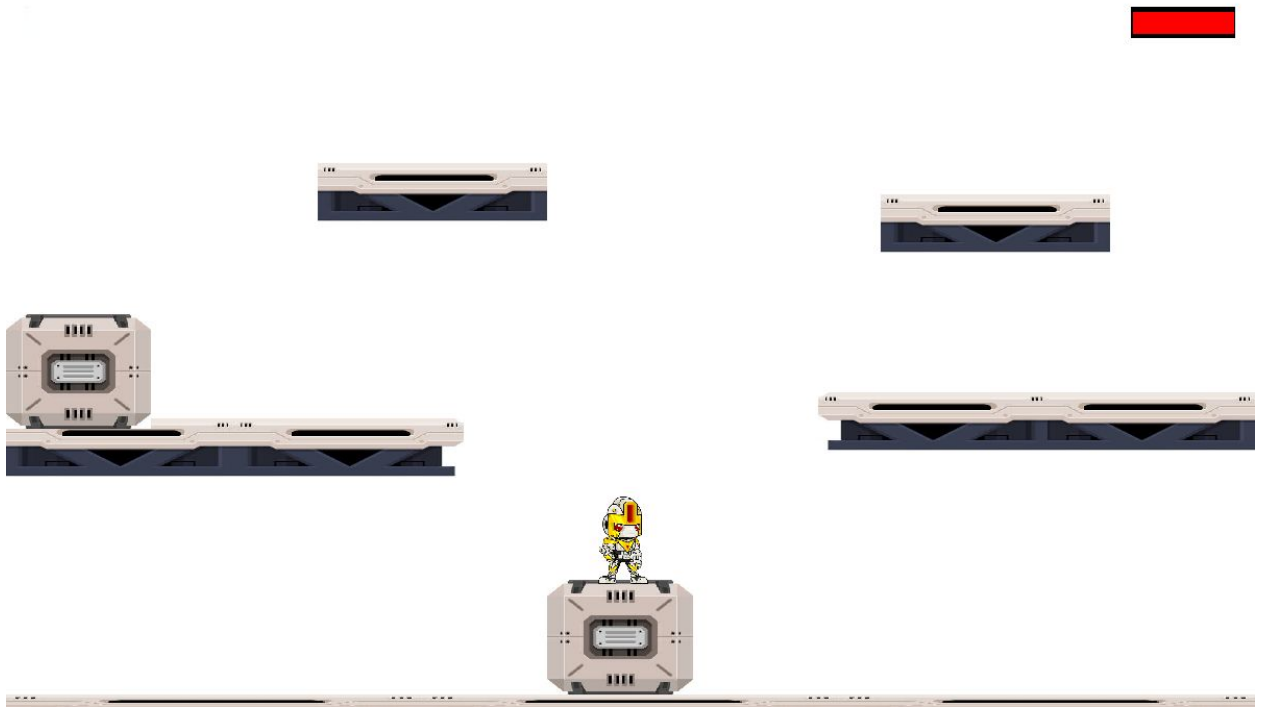
<http://www.playonloop.com/>

<http://www.flashkit.com/soundfx/>

<https://www.freesound.org/>

These resources should be more than sufficient for conceptually implementing this project or for that matter any multiplayer game in python.

Last Man Standing



Do take a look at the github link for the project for a complete guide on the project

<https://github.com/bhavya01/ITSP>

Thank You