

Pygame Simplified Version I Resource added to CAS.

Link to resource : <http://community.computingschool.org.uk/resources/1716>

Full description:

Just to introduce myself a little, I am a final year undergraduate Computer Science Student. At Queen Mary University of London. My final year project falls under the topic of 'teaching'; I have great interests in this area. The subject of this project is teaching computing for GCSE students. I am working under supervision of Dr William Marsh. Who is involved in the Teaching London Computing project. The aim of my project is to produce an interface in simplifying programming games in Python. The library I have thus far built uses the Pygame library and simplifies this library, its called Pygame Simplified. I aim to take a simpler approach of Greenfoot (Java) by minimising the need for Object Orientation. Thus calling a set of functions on an object is all that's needed to make simple games.

Pygame Simplified has the following features:

- How to install Pygame Simplified in easy steps.
- Supporting documentation for the Pygame Simplified library
- Tutorial for Pygame Simplified (shows how methods and classes are used)
- Two worksheets for Pygame Simplified
 1. A car racing game
 2. A paint game.

Both comprehensively explained so that even with little or no programming experience, you are able to follow through the worksheet. - Invent your own computer game - where anyone can get involved and invent a computer game using Pygame Simplified. People are encouraged to share their games they have made using Pygame Simplified so others can learn from them. This will feature on the website.

Pygame Simplified aims to be:

- Motivating (like Greenfoot but for Python)
- Engaging
- Provide an excellent set of resources for teachers.

I would like to share materials with teachers that are (so far) hopefully good for GCSE standards. This is an on going project and I am working on enhancements and another interface for comparison, which I will also share once I am done. All updates are put on the Pygame Simplified website.

I would like to evaluate what I have produced so far and get some feedback from teachers. Pygame Simplified is available on a public website:

<http://webprojects.eecs.qmul.ac.uk/fa303/pgs/>

I also provide a short online questionnaire for feedback; feedback is appreciated and will contribute to improvements on Pygame Simplified:

<https://www.surveymonkey.com/s/FMK2SW9>

I have also made a blog for Pygame Simplified for general discussions and any thoughts that would like to be shared:

<http://fatimaabukar.wordpress.com/>

A short discussion is on <http://fatimaabukar.wordpress.com/> which asks for your opinion on teaching resources in Python. Any discussions and thoughts, is also appreciated and is considered for improvements on Pygame Simplified.

Contribution to taking part in evaluating Pygame Simplified is entirely voluntary. Although Pygame Simplified is intended for classroom use, it is entirely up to you as teachers if you would like Pygame Simplified to be used by your students.

Thanks.

Fatima.

Level: (Beginner)

Duration: (duration, if applicable)

Teaches: (Pygame Simplified teaches students with basic programming knowledge how to program computer games using core programming constructs.)

Pygame Simplified Version II Resource added to CAS.

Link to resource : <http://community.computingschool.org.uk/resources/1983>

Just to introduce myself a little, I am a final year undergraduate Computer Science Student at Queen Mary University of London. My final year project falls under the topic of 'teaching'; I have great interests in this area. The subject of this project is teaching computing for GCSE students. I am working under supervision of Dr William Marsh, who is involved in the Teaching London Computing project and is a member of CAS. The aim of my project is to produce an interface in simplifying programming games in Python. The library I have thus far built uses the Pygame library and simplifies this library, its called Pygame Simplified. I aim to take a simpler approach of Greenfoot (Java) by minimising the need for Object Orientation. Thus calling a set of functions on an object is all that's needed to make simple games.

An enhanced version of the original Pygame Simplified has been released! This is called Pygame Simplified version II. Pygame Simplified version II goes one step further as *key GCSE constructs are required to use some methods effectively*.

The enhanced features of Pygame Simplified are:

- Creating multiple actors, just by calling a method
- Generating a given number of actors at a random position
- Creating actors group (which takes similar actors – meaning no object oriented programming is needed).
- Collisions are simple to apply
- Comprehensive documentation.
- A comprehensive tutorial (shows how methods and classes are used).
- An extra worksheet to show how the methods in this enhanced version can be used to create a simple game.
- Very simple step-by-step installation instructions.

- Two example games added * a guitar game and a bouncing ball example

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- Engaging
- Provide an excellent set of resources for teachers.

I would like to share materials with teachers that are hopefully good for GCSE standards.

I would like to evaluate what I have produced so far and get some feedback from teachers. Pygame Simplified is available on a public website:

<http://webprojects.eecs.qmul.ac.uk/fa303/pgs/>

I also provide two short online questionnaire for feedback; feedback is appreciated and will contribute to improvements on Pygame Simplified:

Pygame Simplified Version II

<https://www.surveymonkey.com/s/FF3VTP9>

I have also made a blog for Pygame Simplified for general discussions and any thoughts that would like to be shared:

<http://fatimaabukar.wordpress.com/>

Contribution to taking part in evaluating Pygame Simplified is entirely voluntary. Although Pygame Simplified is intended for classroom use, it is entirely up to you as teachers if you would like Pygame Simplified to be used by your students.

If you have evaluated Pygame Simplified version I and version II, Which do you prefer? Pygame Simplified version I or version II?

Thank you.

Fatima.

Level: (Beginner)

Teaches: (How to apply GCSE constructs to making a simple game)