Project report on

"War Galaxy   (2D interactive game)"

Synopsis

by

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march 2018

introduction:

the project "war galaxy" is a 2D single player video game, which can be played on any computer provided that the computer satisfies some minimum requirements.

The key features of a good video game include,

- originality
- Freshness and replayability
- equal opportunity
- uniformity
- quality of components

In our game, we have tried to maintain all the above mentioned qualities without compromising the overall user experience.

The game operates in single player mode in which the RANGER-SHIP has the task to DESTROY all the ENEMY ships which are trying to invade the galaxy. At a certain Level, the CAPATAIN ENEMY SHIP arrives which needs to be destroyed so as to completely rescue the galaxy.

The game is well suitable for everyone, with almost no- violence.

Purpose:

the purpose of designing the Game is as follows,

Computer games are being used to provide numerous helpful benefits. They help us to treat a variety of disorders and disabilities, to make us have fun and entertainment, and serve a range of educational functions.

The most important aspect of playing computer games is treating some diseases. Researchers are finding that computer games can be actually tweaked to treat people with phobias. The belief behind this treatment method is that exposing people to the source of their fear with in a controlled environment may actually lead to a cure. Two of the most common phobias that have been treated with computer games are a fear of confined spaces and heights. Teachers have found that computer games specifically prepared for language disabilities provide a unique way for children to overcome their disabilities.

Another important aspect is that computer games providing us to have fun. When we are very bored tired or stressed, Computer games are good source of enjoyment. Moreover, we have fun playing computer games because they give us time to be with our friends. It is a great opportunity to socialize. We can talk with our friends about other things at the same time. In addition, when we spend time with our friends and relax with friends, we have more energy for other work.

Last but not least, Computer games serve a range of educational functions. Computer games encourage different ways of learning, imagination, creativity and exploration. For example, Simulation games could be used as a means of preparing learners for the world of work. Computer games also help pupils to develop key learning skills such as cognitive process, logical thinking and independent decision making.

To sum up, Computer games have a main role in our lives. We can use of them for therapy disease, having fun and educating better. Who could deny the necessity of computer games?

Scope:

the scope of this project is is the system on which the is installed.
The project is developed as a desktop application, but it can also be executed on the devices which fulfil the minimum technical requirements.

Hardware and software requirements:

hardware requirements:
- processor: Intel pentium series or later.
- Ram: minimum 1GB
- atleast 200MB hrad disk space.

Software requirements:
- Operating system: windows xp or later, linux distributions such as ubuntu, fedora, redhat etc, and Mac os 10 or above.
- python 3.4 or later
- pygame 2.0 stable

description of softwares used:

python:
     python is an open source, platform independent, programming language, which offers several advantages over othe languages by, providing opensource, necessary libraries which makes it easy to code in the language.
Python also provides platform independence, which means, we can execute the same code on almost all the machines on whcih python is supported.

Pygame:
     pygame is special module designed for python, which helps in programming games for pythonj, it has several predefined functions which can be used for further game development.

Overview:
     Galaxy war is basically a shooting game, The game operates in single player mode in which the RANGER-SHIP has the task to DESTROY all the ENEMY ships which are trying to invade the galaxy. At a certain Level, the CAPATAIN ENEMY SHIP arrives which needs to be destroyed so as to completely rescue the galaxy.

     The game can be played using ARROW KEYS (for movement) and SPACE KEY(for shooting).

     The ultimate goal is to destroy all the enemy ships.

Conclusion:

the game "Galaxy War" is designed using python and pygame and the Gameart has been downloaded from opengamearts.com and Google images. The game has been thoroughly tested with almost all possible inputs, and is found to be free of the bugs, and runtime errors.

The platform independency can be achieved if the minimum system requirements are fulfilled.