Reduced Instruction Set Of A Dog

Mini Project Report of

Open Source Technology Lab

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Mini Project Report Approval for “Open Source Technology Lab”.

This mini project report entitled (RISOAD) by

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have successfully completed for the course “Open Source Technology Lab”.

Signature of Subject Incharge

Date:

Place:

ABSTRACT

Reduced **I**nstruction **S**et **O**f **A** **D**oge is an attempt to introduce programming at an elementary level. The whole project is based on Python and designed in Pygame. The project is in the form of a game which has certain “commands” and each level produces the user with a maze which needs to be solved using the in game commands.

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INTRODUCTION OF MINI PROJECT

RISOAD is a made up programming language which focusses on introducing programming concepts to school level students such as header files,simple moving instructions and for loops and guide them in developing logic and problem solving skills.

The whole project provides a graphical and console environment to make it fun as well as giving the feel of real programming. The project is desgned and developed in Pygame which is a GUI interfacing module made for python.

What is Pygame?

Pygame is a cross-platform set of Python modules designed for writing video games. It includes computer graphics and sound libraries designed to be used with the Python programming language.

Architecture and features

Built over the Simple DirectMedia Layer (SDL) library, with the intention of allowing real-time computer game development without the low-level mechanics of the C programming language and its derivatives. This is based on the assumption that the most expensive functions inside games (mainly the graphics part) can be abstracted from the game logic, making it possible to use a high-level programming language, such as Python, to structure the game.

Other features that SDL doesn't have include vector math, collision detection, 2d sprite scene graph management, MIDI support, camera, pixel array manipulation, transformations, filtering, advanced freetype font support, and drawing.

Applications using pygame can run on Android phones and tablets with the use of Pygame Subset for Android (pgs4a).Sound, vibration, keyboard, and accelerometer are supported on Android.

SOURCE OF INSPIRATION:MSW Logo

MSWLogo is an interpreted language based on Logo, with a GUI front end. It was developed by George Mills at MIT. Its core is the same as UCBLogo by Brian Harvey. It is free software, with source available, in Borland C++.

MSWLogo supports **multiple turtles, and 3D Graphics**. MSWLogo allows input from COM ports and LPT ports. MSWLogo also supports a windows interface thus I/O is available through this GUI- and keyboard and mouse events can trigger interrupts. Simple GIF animations may also be produced on MSWLogo version 6.5 with the gifsave command. The program is also used for educational purposes. Jim Muller wrote *The Great Logo Adventure*, a complete Logo manual using MSWLogo as the demonstration language.

MSWLogo has evolved into **FMSLogo**: An Educational Programming Environment, a free, open source implementation of the Logo programming language for Microsoft Windows. It is released under the GPL and is mainly developed and maintained by David Costanzo.

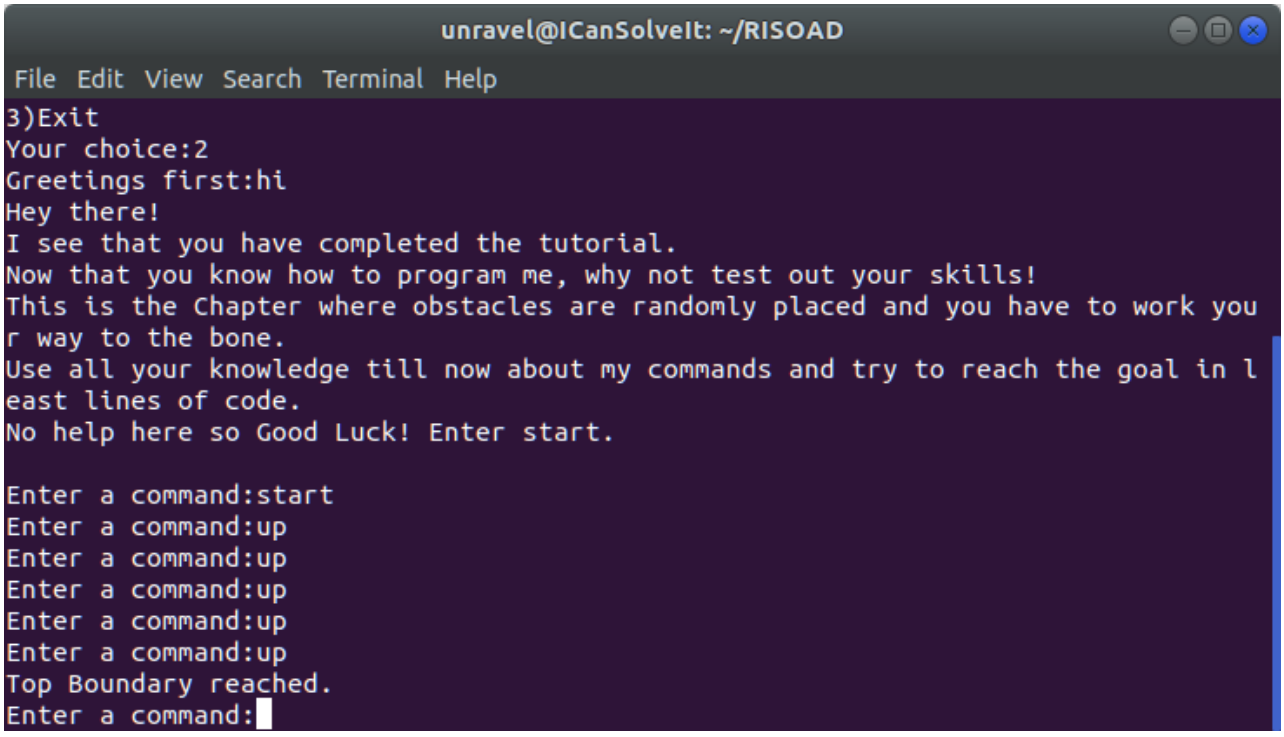
This project imitates only the basic functions supported by MSW Logo that is the turtle and its movement in 4 directions.

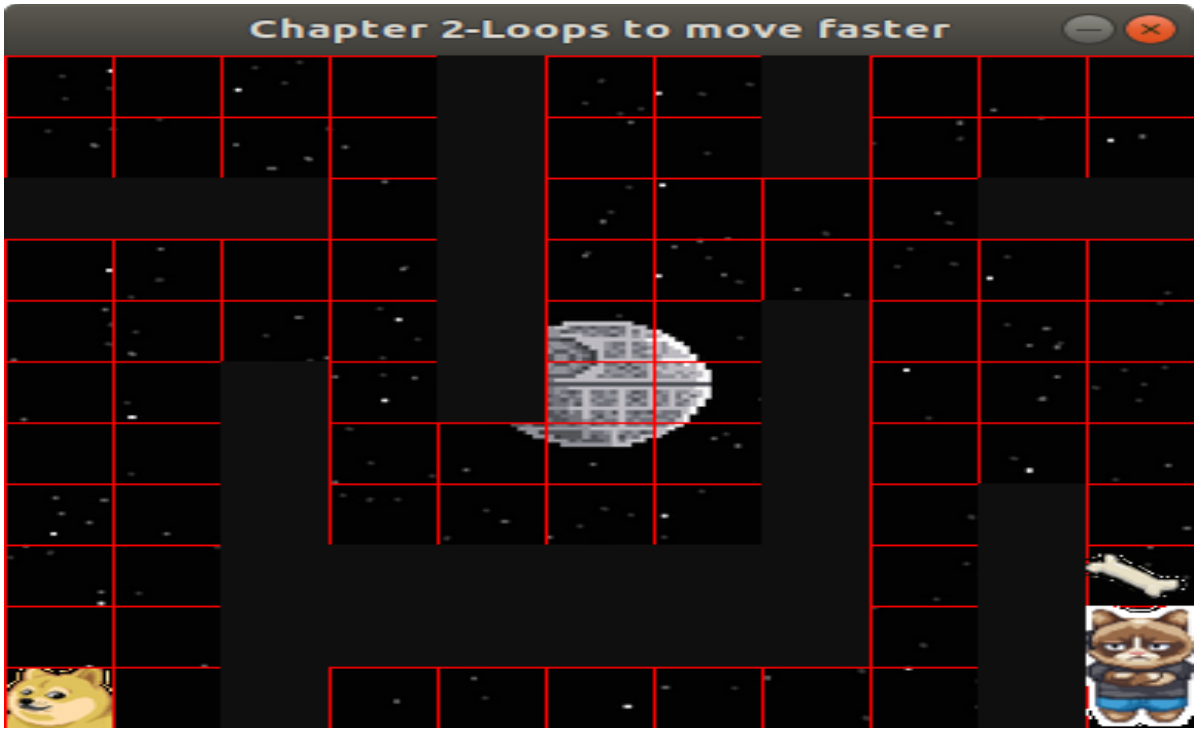
HOW TO PLAY AND CHAPTERS

The basic rules of the game are explained while the program is running i.e. the movement and the programming concept related to it.

Each chapter is presented in the form of a maze which needs to be solved using the in-game commands.

Currently the project has 2 chapters which introduce concept of commands and looping structures




Chapter 2-Loops to move faster

CONCLUSION

This project was developed on UBUNTU in python3

This project was successfully implemented and Presented at Tantravihar