**GUI BASED GAME**

**END TERM REPORT**

***by***

**MANISH KUMAR, SINDHUJA PRIYA, GANESH**

Section: K19PV

Roll Numbers: 26,54,65



**Department of Intelligent Systems,**

**School of Computer Science Engineering,**

**Lovely Professional University, Jalandhar**

November 2020

## APPENDIX 2

**Student Declaration**

This is to declare that this report has been written by me/us. No part of the report is copied from other sources. All information included from other sources have been duly acknowledged. I/We aver that if any part of the report is found to be copied, I/we are shall take full responsibility for it.

Signature:

Name: SINDHUJA PRIYA

Roll Number: 54

Place:

Date: 28-10-2020

**APPENDIX 3**

**TABLE OF CONTENTS**

**TITLE: ARCHERY KING PAGENO.3**

|  |  |
| --- | --- |
| **1. Background and objectives of project assigned ................** |  |
| **1.1 OpenCV** |  |
| **1.1.1** **SYS** |  |
| **1.1.2 PYGAME**  **1.1.3 RANDOM** |  |
| **2.1 TABLE OF CONTENT** |  |
|  |  |
| **3.1 DESCRIPTION OF PROJECT**   1. **HOW TO PLAY THIS GAME? AND HOW IT WILL BE THE EVLUATION OF GUI BASED GAMES?** |  |
|  |  |
| **3.2 SUMMARY** |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

APPENDIX 4

BONAFIDE CERTIFICATE

Certified that this project report “**GUI BASED GAME**” is the Boniface work of “MANISH KUMAR, SINDHUJA PRIYA, GANESH” who carried out the project work under my supervision.

### <<Signature of the Supervisor>> (Due to Covid 19, signature is exempted)

<<Dr. Dhanpratap Singh >>

<<Academic Designation>>

<<ID of Supervisor>>

<<Department of Supervisor>>

### **What is GUI based game?**

### A **GUI** is a larger, broader term that's used to describe anything meant for the player (and not the character the player is controlling) to directly interact with. ... HUDs (Heads Up Displays) are **GUI** elements that display information in real time, while the user is playing the **game**

WHAT IS SYS? WHAT ARE THE USES OF SYS?

**Systems**-**based games** are everywhere but most associated with the “immersive sim” genre. ... Players benefit from a more dynamic and varied **game** experience, and developers benefit through less rigid implementations of the core of their **games**.

The **sys module** provides information about constants, functions and methods of the **Python** interpreter. dir(system) gives a summary of the available constants, functions and methods. Another possibility is the help () function. Using help(**sys**) provides valuable detail information.

WHAT IS PYGAME? WHAT ARE THE USES OF IT?

**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.

**Pygame** is a cross-platform set of **Python** modules which is **used** to create video games. It consists of computer graphics and sound libraries designed to be **used** with the **Python** programming language.

WHAT IS RANDOM? WHAT ARE THE USES OF IT?

Functions in the **random** module depend on a pseudo-**random** number generator function **random** (), which generates a **random** float number between 0.0 and 1.0. **random**. **random** (): Generates a **random** float number between 0.0 to 1.0. The function doesn't need any arguments.

**Random** numbers are useful for a variety of purposes, such as generating data encryption keys, simulating and modelling complex phenomena and for selecting **random** samples from larger data.

(\*) **TABLE OF CONTENT**

Table of Contents

* [Background and Setup](https://realpython.com/pygame-a-primer/#background-and-setup)
* [Basic PyGame Program](https://realpython.com/pygame-a-primer/#basic-pygame-program)
* [PyGame Concepts](https://realpython.com/pygame-a-primer/#pygame-concepts)
  + [Initialization and Modules](https://realpython.com/pygame-a-primer/#initialization-and-modules)
  + [Displays and Surfaces](https://realpython.com/pygame-a-primer/#displays-and-surfaces)
  + [Images and Rects](https://realpython.com/pygame-a-primer/#images-and-rects)
* [Basic Game Design](https://realpython.com/pygame-a-primer/#basic-game-design)
  + [Importing and Initializing PyGame](https://realpython.com/pygame-a-primer/#importing-and-initializing-pygame)
  + [Setting Up the Display](https://realpython.com/pygame-a-primer/#setting-up-the-display)
  + [Setting Up the Game Loop](https://realpython.com/pygame-a-primer/#setting-up-the-game-loop)
  + [Processing Events](https://realpython.com/pygame-a-primer/#processing-events)
  + [Drawing on the Screen](https://realpython.com/pygame-a-primer/#drawing-on-the-screen)
  + [Using .blit() and .flip()](https://realpython.com/pygame-a-primer/#using-blit-and-flip)
* [Sprites](https://realpython.com/pygame-a-primer/#sprites)
  + [Players](https://realpython.com/pygame-a-primer/#players)
  + [User Input](https://realpython.com/pygame-a-primer/#user-input)
  + [Enemies](https://realpython.com/pygame-a-primer/#enemies)
* [Sprite Groups](https://realpython.com/pygame-a-primer/#sprite-groups)
* [Custom Events](https://realpython.com/pygame-a-primer/#custom-events)
* [Collision Detection](https://realpython.com/pygame-a-primer/#collision-detection)
* [Sprite Images](https://realpython.com/pygame-a-primer/#sprite-images)
  + [Altering the Object Constructors](https://realpython.com/pygame-a-primer/#altering-the-object-constructors)
  + [Adding Background Images](https://realpython.com/pygame-a-primer/#adding-background-images)
* [Game Speed](https://realpython.com/pygame-a-primer/#game-speed)
* [Sound Effects](https://realpython.com/pygame-a-primer/#sound-effects)
* [A Note on Sources](https://realpython.com/pygame-a-primer/#a-note-on-sources)
* [Conclusion](https://realpython.com/pygame-a-primer/#conclusion)

**(**\***)** **DESCRIPTION OF GUI PROJECT**

A **GUI** allows the user of a computer to communicate with the computer by moving a pointer around on a screen and clicking a button. ... A program on the computer is constantly checking for the location of the pointer on the screen, any movement of the mouse, and any buttons pressed.

**HOW TO PLAY:**

There is a bow and some arrows and a target board. So, it is a small screen game with least graphics. And its coding has been done on “pygame”. As it is a GUI game. A **graphical user interface** (GUI) is a type of user interface through which users interact with electronic devices via visual indicator representations.

Archery is a mini game made with python using pygame. In this game a bow floats in the air on the left side of the screen and on the other side there will be a target just sitting there. The player’s goal is to shoot arrows at the target.

(\*) SUMMARY

In this project project we have a build a GUI based game which is based on libraries like pygame, sys, random. The logic behind the project is that, when the bow is floating on the left side and if you press space bar and release then the arrow shoots the target. If you shoot arrow at the middle of the target your score will be 3 and score of next two circles is 2,1 respectively.

In this project we have made several classes and based different functions. Also, we have made the use of inheritance.

So, what are you waiting for go and enjoy the game.