Department of Computer Science & Information Technology

Object-Oriented Programming (OOP)

“Flappy Bird Game”

Project Report

Course Code: CT-260

SEC: B

**GROUP MEMBERS:**

* **EMAN SHAHID(CT-22058)**
* **SYED ALI MURTAZA RIZVI(CT-22093)**
* **TAQI HAIDER(CT-22092)**

**PROBLEM STATEMENT:**

This Code is a C++ Program that creates a simple game called “FLAPPY BIRD” using the “olcConsoleGameEngine” library.

**PROJECT DESCRIPTION:**

The program defines a class called “FLAPPY BIRD” that inherits from “olcConsoleGameEngine”. The Class contains several members variables that represent different aspects of the game, such as the bird’s position, the game’s score, and the obstacles that the bird must avoid.

**DESCRIPTION OF FUNCTIONALITIES**

We have used 2 user defined functions which are as under:

**1.OnUserCreate:**

The "OnUserCreate" function is a virtual function that is called once when the game starts. It initializes the game's variables and sets the initial position of the bird.

2.OnUserUpdate:

The "OnUserUpdate" function is another virtual function that is called repeatedly during the game loop. It contains the main game logic, including updating the bird's position and checking for collisions with obstacles.

INDIVIDUAL CONTRIBUTIONS:

1. **Syed Ali Murtaza Rizvi(CT-22093):**

Provided the main idea of game. Worked with the components of base class “olcConsoleGameEngine” and its main functions which are inherited by derived class.

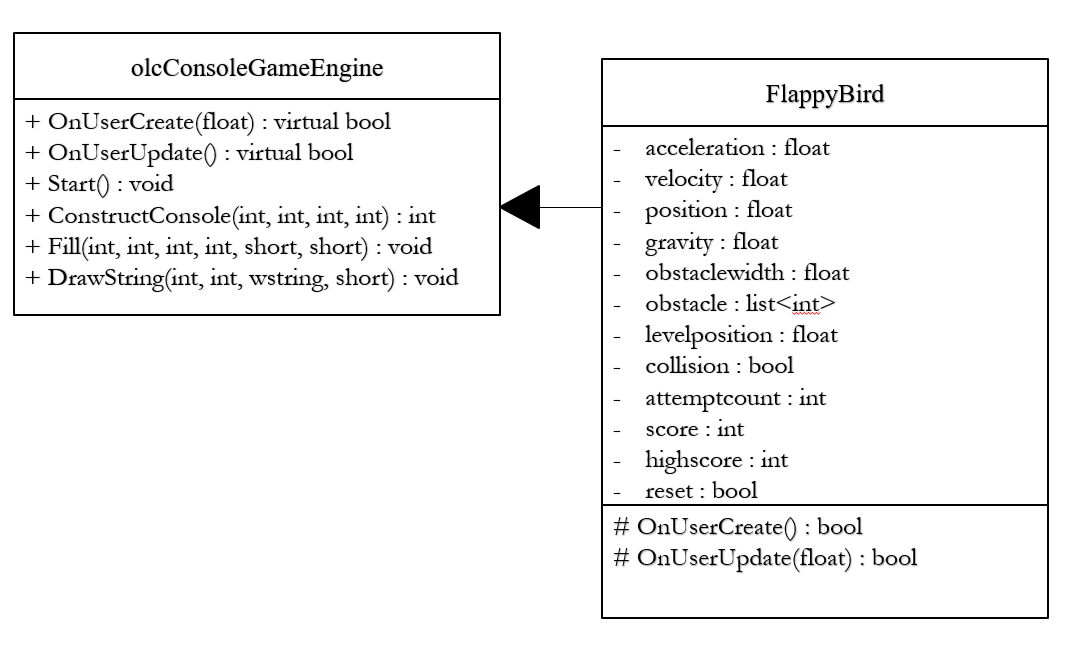
1. **Taqi Haider(CT-22092):**

Basically worked with the logic of game components such as bird’s movement and obstacles logic and also worked on project report.

1. **Eman Shahid(CT-22058):**

Implemented and ensured the use of pillars of Objected Oriented Programming and made code readable and less complex by removing unnecessary conditions and variables. Also worked on Project report.

**UML**

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