**National University of Computer & Emerging Sciences**

**Karachi Campus**



**SNAKE GAME**

**Project Proposal**

**Programming Fundamentals**

**Section: BCS-1F**

**Group Members:**

**23K-0836 Muhammad Saud Imran**

**23K-0891 Zayan Ahmed**

**23K-0665 Muhammad Uzairuddin**

Project Proposal

* **Introduction**

**“Snake Game"** is a classic arcade game that is both entertaining and informative. Control a growing snake as it feeds on randomly generated food, but keep an eye out for collisions with walls and its own tail. Dive into the realm of classic gaming with our Snake Game.

* **Existing System**

The classic and nostalgic Snake Game that we all have played at least once in our life

and tried to reach the highest score possible in. It is our inspiration and what we look up

to while doing this project.

* **Problem Statement**

We thought it would be fascinating to add random obstacles to the game while maintaining its basic feel.

* **Proposed Solution**

We added obstacles to the game board as 'X' characters in the altered snake game code. These obstacles are specified inside the obstacle’s two-dimensional array, where the position of each obstacle is represented by a sub-array. To ensure that each obstacle is positioned randomly on the board, random X and Y coordinates are generated for each obstacle during the game setup. By comparing these obstacles' locations with the current loop cell, the Draw function displays them. If a match is found, the 'X' character is printed.

* **Salient Features**

Capital ‘O’ is used to symbolize the snake. An asterisk (\*) is used to indicate the fruit. Using the keyboard's W, A, S, and D keys, the user can direct the snake in any direction. The snake grows (small ‘o’ is added). The user's score will go up by 10 points when it consumes a fruit. Within the borders, the fruit will automatically regenerate. The game ends whenever the snake touches the boundary.

* **Tools & Technologies**
* **Programming language:** C
* **Framework:** Dev C++
* **Operating System:** Windows