**A MINI PROJECT**

ON

**“*Chatting Application”***

Submitted in partial fulfillment of the requirements of the degree

**BACHELOR OF ENGINEERING** IN

**INFORMATION TECHNOLOGY**

Supervisor

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# CERTIFICATE

This is to certify that the Mini Project entitled **“ Snake Game ClassicFire ”** is a bonafide work of **Akash Kulal(14), Sushant Singh(24), Naman Suthar(25)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **“Bachelor of Engineering”** in **“Information Technology” .**

**(Prof. M.R. Gorbal )**

Supervisor

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Head of Department Principal

# Mini Project Approval

This Mini Project entitled **“ Snake Game ClassicFire”** by **Akash Kulal (14), Sushant Singh (24) , Naman Suthar (25)** is approved for the degree of **Bachelor of Engineering** in **Information Technology.**

### Examiners

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(Internal Examiner Name & Sign)

**2…………………………………………**

(External Examiner name & Sign)

Date:

16th December 2020

Place:

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# Acknowledgment

We would like to thank all our teachers for guiding us throughout the project.

We would like to thank all those senior students of our college who replied to our endless queries without any hesitation.

**We acknowledge the creators of PostgreSQL [QRBG –** [**http://postgresql.org**](http://postgresql.org/)**], which provides our database server with high quality response.**

# Abstract

This project aims to bring the fun and simplicity of snake game with some new features. It will include computer controlled intelligent opponents whose aim will be to challenge the human players. It will bring the classic game with its classic rules but In this game snake also have to face **Obstacle as Fire** and had to find all its way to the food , with all new User Interface that makes this classic game some attractive and fresh.

The player is in control of a snake which is constantly moving around a square field of cells. The length of the snake is a whole number of cells. At any time, the snake moves in one of the 4 directions, parallel to a side of the square, and the player can change the direction using the 4 arrow keys of the keyboard. If the snake crashes into a side, or into itself, then it is dead, and the game stops. Also in the field there is a **Apple** as a food, When the head of the snake hits this, the Apple is eaten, and the snake becomes one cell longer. This event increases the score of the player. At the same time, a new piece of food is placed in a randomly chosen cell somewhere in the field, which was previously clear (empty). And if the snake clashed or meet the **Fire ,** Thee length of snake decreases by one cell, and similarly to the Apple Fire is also placed randomly. The game has a score message bar, informing the player what is the current score, and also a single message which changes from time to time. For example, when food is eaten the player is informed how much score was just obtained, and when the snake crashes a suitable message is shown. At any time, the player can end the game and start a new one, simply by pressing ‘Spacebar’ on the keyboard. The most common use of this will be after the snake has crashed, so as to continue playing with a new game.

This project explores a new dimension in the traditional snake game to make it more

interesting and challenging. The simplicity of this game makes it an ideal candidate for a minor project as we can focus on advanced topics.

# Objectives

This game aims to change the way people think of traditional snake game. It will offer the experience of commercial multilayer games to the player retaining the simplicity of traditional snake game.

The major objectives of this project are:

* + Create a snake game that will have all the functionality of traditional snake games.
  + Introduce obstacle functionality in the game that will allow to play the game with more adventure.
  + And Also this adventure goes increases as time passes i.e. scores increases Level of difficulty goes increasing.

# Programming Environment

We used several open source tools to develop this project:

* + **Eclipse Neon 12 IDE**

All the developers of Snake Game Classic team used Eclipse IDE for the development of this project.

* + **Inkscape 0.45 and Gimp 2.2**

These graphics development tools were extensively used for the development of User Interface components. The illustrations presented in this report have also been prepared using these open source tools.

* + **PostgreSQL Database**

**The data obtained as HighScore of the Game was updated and plotted using PostgreSQL database server.**

1. **Relevant Topics :**
2. **Classes**:- We have 3 classes
   * Main.java
   * Gameplay.java
   * Connectsql.java
3. **Objects** : An object is created from a class. We have already created the class named Connectsql, so now we can use this to create objects.

To create an object of Connectsql, specify the class name, followed by the object name, and use the key

1. **Interface in JAVA.** :-

* Here interface implements snake object which is in the main.java with the ActionListener class which is in the Gameplay.java

1. **Loops in JAVA**. :-

* Here for , if and nested if loops are used. These loops are used for to enable buttons, Player turns and giving winning combination.

1. **Connection to SQL using JDBC :-**
   * Here we have successfully added a connection to the PostgreSQL database server with the help of JDBC driver.

# Conclusion

We were successful in creating a adventurous version of traditional snake game. The computer controlled intelligent opponent as ***FIRE*** have been successfully tested in the game is a unique feature of Snake Game ClassicFire.

We learned several project management techniques used by professionals to develop large scale project. The experience of working in team and integration of modules developed independently, with just requirement specifications, is a very important achievement for our team.

1. **References**

## Websites

1. Eclipse Community Docs [*http://wiki.netbeans.org/wiki/view/CommunityDocs*](http://wiki.netbeans.org/wiki/view/CommunityDocs)
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