



# SNAKE GAME

# MOTIVATION

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To give a feel of old games that were played on a keypad mobile and reliving the experience and enjoyment of a classical game.



# HIGHLIGHTS OF PROJECT

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## Library

We are using two libraries here  
graphic.h and ctime



## User Input

User input handling for controlling the  
snake's movement.



## Generating Food

Generation of random food positions  
and checking for collisions with the  
snake.



## Snake Body

Drawing the snake body, including the  
head and tail segments.

# HIGHLIGHTS OF PROJECT

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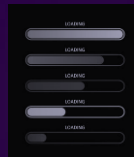
## Making Obstacles

Implementation of obstacles and boundaries.



## Score Tracking

Keeping track of the player's score based on the length of the snake.



## Status of Game

Displaying the game status, such as "Playing," "Game Over," or "You Won!"



## Loading and Transitions

Creation of loading screen and smooth transition between game frames..



# LEARNINGS

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- Implementing a graphical game using the graphics.h library introduced the concept of rendering graphics, handling user input, and implementing game logic.
- Collision detection logic to detect collisions between the snake's head and the food or obstacles.
- Working with multiple game frames using the double buffering technique.
- Implementing a loading screen for visual appeal and user experience enhancement.
- Random Number generation using ctime header .





# AREAS OF IMPROVEMENT

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## 1.TIME COMPLEXITY

As this code contains various recursive calls so time complexity is generated.

## 2.MOVING OBSTACLE

We can add moving barriers and obstacles to make the game more adventures.

## 3.SOUND EFFECTS

Adding Sound Effects synced with the game play will enhanced the gaming experience of user.

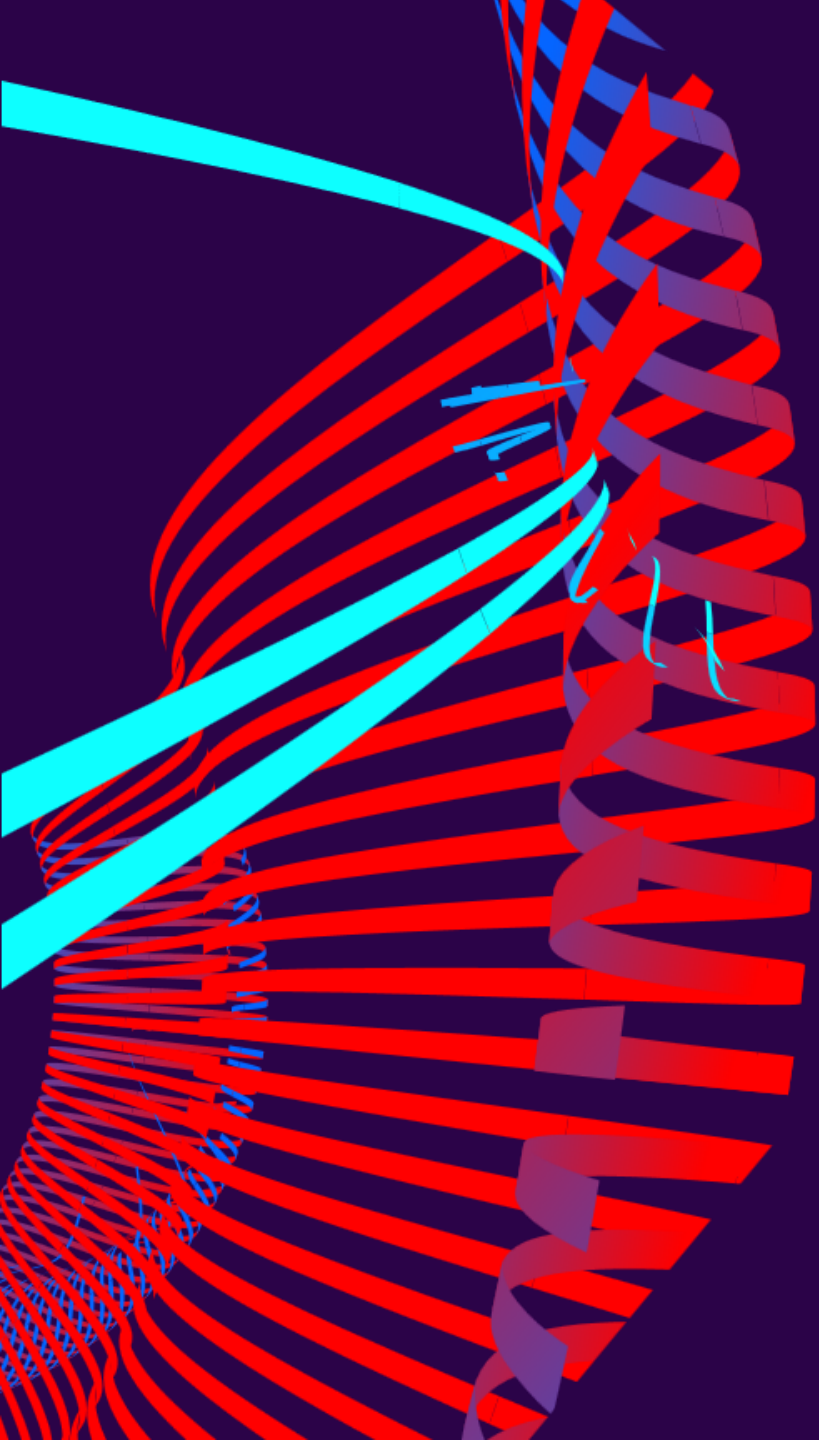
## 4.PLAY & PAUSE

We can add resume button in the game to get more involved in movements.



## FUTURE SCOPE

- The Snake game is a classic and popular game that can serve as a recreational activity for users.
- It can be used as a starting point for learning game development concepts and improving programming skills.
- The project can be expanded to include additional features, levels, or game modes to make it more appealing to users.
- It can be integrated into a larger gaming platform or used as a part of a game development portfolio to showcase programming abilities
- Multiplayer Enhancements will make it more adventures. Real-time leader board , chat system will also make it more professional.



# TEAM OVERVIEW



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1. My experience working on the Snake Game project was both educational and rewarding.
2. The project involved various tasks, including creating a Snake header file
3. Installing the graphics.h library, and creating a README file.
4. Additionally, I utilized GitHub to manage the project's codebase and collaborate with others.
5. I learned how to create a repository, commit changes, and manage branches.
6. Overall, working on the Snake Game project was a fulfilling experience.

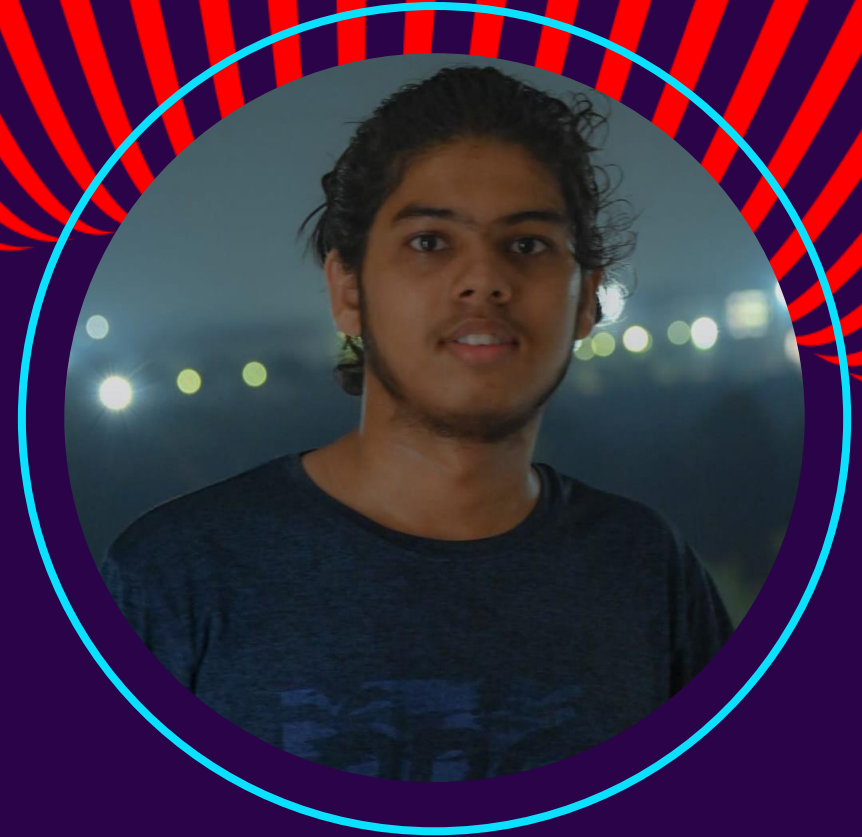


TUSHAR RANJAN  
LEADER

22EE02007

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1. My experience working on this project was exciting and challenging.
2. The project involved several tasks, including creating a project PDF by compiling all the necessary information, including project goals, methodologies, and results, into a well-structured document.
3. Implementing a food function for generating food items within the game and handling interactions with the snake.
4. Creating a project video was a fun and creative aspect of the project. It allowed me to demonstrate the gameplay, features, and functionalities of the project in a visual and engaging way.
5. Overall it was a good experience at all.



C H E T A N   S H A R M A

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1. I contribute to the project's development and learn valuable skills in version control and teamwork.
2. I began implementing the main function, this involved handling user input, updating the game's state, and managing the game loop to provide an engaging and interactive experience.
3. Simultaneously, I leveraged GitHub to facilitate collaboration and version control throughout the project.
4. I created a repository and established a well-structured file hierarchy, ensuring that the main function and other relevant files were appropriately organized.
5. Overall, my experience with the main function and GitHub in this project was highly beneficial.



NOBEL DAS

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1. My experience working on this project involved several key aspects, including setting up CodeBlocks.
2. Installing the graphics.h library.
3. Creating a project video involved showcasing the game's features, gameplay, and overall functionality.
4. Throughout the development process, I encountered various bugs in the game that required debugging and debugging the game for any existing bugs.
5. In summary, my experience working on this project was a valuable learning journey.



PRIOTOSH SARKAR



The background of the slide features a complex, abstract pattern of wavy, parallel lines in red and blue. These lines originate from the left side and curve towards the right, creating a sense of depth and movement. The lines are of varying thickness and are set against a dark purple background.

## SUMMARY

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The Snake game project is a classic arcade-style game. Player control a snake and try to eat food while avoiding collisions with walls and their own tail. The game features a graphical user interface with colorful graphics and sound effects. Overall, the Snake game project serves as an excellent starting point for learning game development concepts and provides ample opportunities for expanding and customizing the game to create a more engaging and polished gaming experience.



THANK YOU