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\documentclass{article}

\usepackage{graphicx}

\title{\textbf{Shri Govindram Seksaria Institute of technology Indore (M.P.)}}

\author{\textbf{Shivkumar Rawat}}

\begin{document}

\maketitle

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 \includegraphics[width=3cm]{logo.png}

\subsection*{\textbf{\textit{Programming Practices : Mini Project(Snake Game )}}}

\subsection*{\textbf{\textit{https://github.com/Shivkumar Rawat/pp/}}}

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\subsection*{Objective}

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The objective of creating a mini project like a Snake game in Java with the aim of providing an entertaining and interactive gaming experience. Develop the core game logic and mechanics of the classic Snake game, allowing the player to control a snake that grows by eating food items while avoiding collisions with the boundaries and itself.

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\subsection*{Language Used}

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\choices Java language(OOPS)

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\subsection*{Purpose}
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1.Developing a Snake game in Java can help individuals, especially beginners, learn and practice Java programming concepts. It provides a hands-on way to understand Java's syntax, data structures, and object-oriented principles

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2.Creating a simple game like Snake allows you to gain experience in game development. You'll learn about game loops, rendering graphics, handling user input, and implementing game mechanics.

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3. Game development often involves solving various challenges, such as collision detection, game logic, and user interaction. This helps improve your problem-solving and critical thinking skills

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\subsection*{Scope}

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\item The scope of a mini project like a Snake game in Java can vary depending on your objectives and the complexity of the game you want to develop. Here are some aspects of the project's scope that you might consider.

\item Define the gameplay features you want to include in your Snake game. This might involve deciding on the rules of the game, such as how the snake moves, how it grows, how the game ends, and any power-ups or obstacles.

\item Determine the level of graphics and design you want to implement. This could range from simple geometric shapes to more elaborate graphics and animations. Consider how the game elements will be displayed on the screen.

\item Decide on the user interface components, such as a menu system, score display, and game over screen. Implementing user-friendly UI elements can enhance the player's experience.

\item If you want to add a competitive element, consider implementing a scoring system and possibly a leaderboard to encourage players to achieve higher scores.

\item Decide whether you want to include sound effects and background music in the game. This can add to the immersion and enjoyment of the game.

\itemYou can introduce different levels with varying degrees of difficulty to keep the game engaging and challenging for players as they progress.

\item Define what happens when the game ends. Players may want the option to restart the game, view their final score, or return to the main menu.

\item Consider adding settings that allow players to customize aspects of the game, such as the snake's appearance or game speed.

\item If you want to expand the scope, you could add multiplayer functionality, enabling players to compete with or cooperate with others online.

\item Allocate time for thorough testing and debugging to ensure the game functions as expected and is free from critical bugs.

\item Create documentation, including a user manual or README file, to explain how to play the game, the rules, and any customization options.

\itemDocument your project's source code, including comments and explanations, to make it more understandable and maintainable.

\item Consider whether you want to publish your game for others to play. This might involve creating executable files, distributing the game online, or sharing it with friends and peers.

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\section*{\textbf{Output}}

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 \includegraphics[width=8.8cm]{snakegame.png}

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\section*{\textbf{Debugging}}

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 \includegraphics[width=8.8cm]{debug2.png}

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