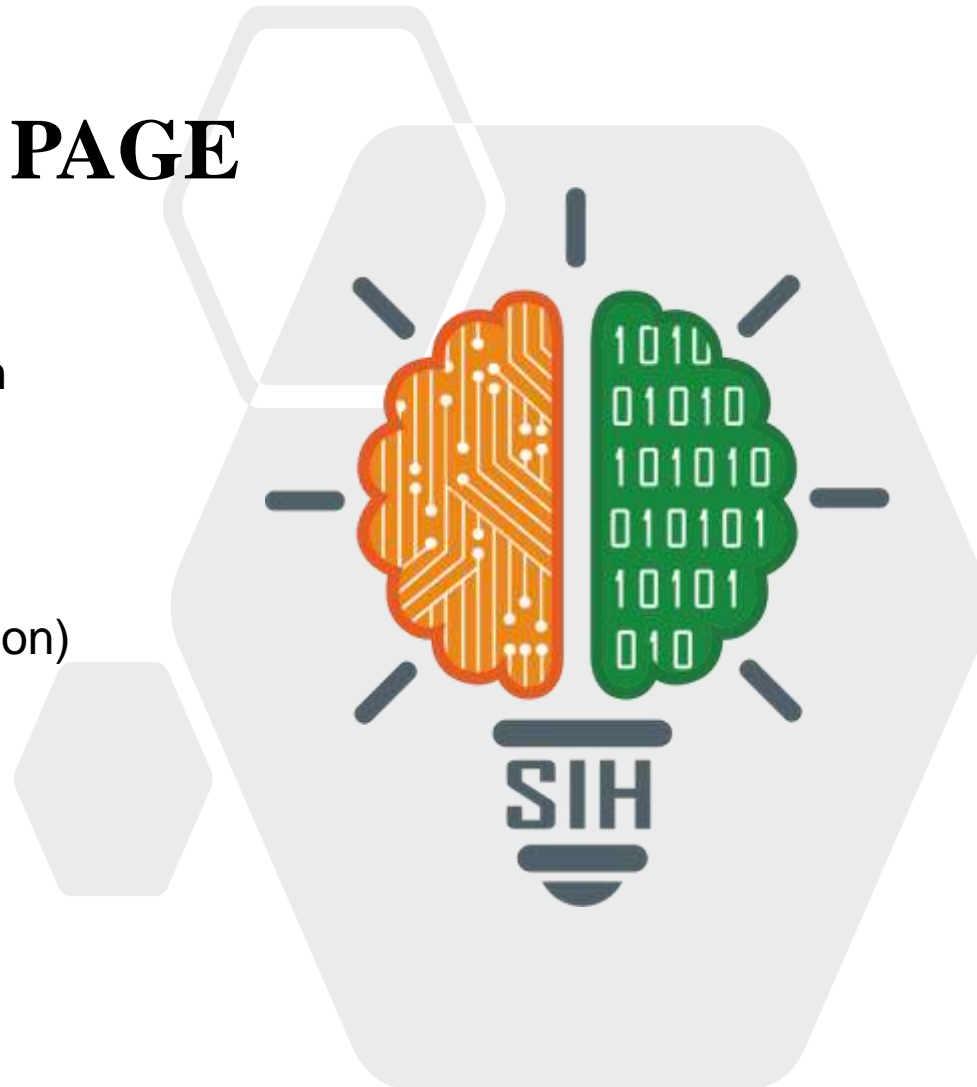


## TITLE PAGE

- **Title:** Code with AI
- **Subtitle:** Revolutionizing Coding Education with Artificial Intelligence
- **Additional Information:**
  - **Problem Statement ID:** ( 1586 )
  - **Problem Statement Title:** (student innovation)
  - **Theme:** (smart education)
  - **PS Category:** Software
  - **Team ID:** (--)
  - **Team Name:** (---)
- **Image:** A robot coding (ensure it's relevant and professional)



# IDEA TITLE

## Problem and Solution Overview

- **Title:** The Challenge & Solution
- **Problem Statement:**
  - Difficulty in understanding complex coding concepts
  - Limited feedback and guidance for learners
  - Time-consuming debugging process
- **Solution Overview:**
  - AI-powered guidance for learners
  - Step-by-step tasks and feedback
  - Personalized learning experience
- **Image:** A frustrated coder and a coder with a lightbulb moment



# TECHNICAL APPROACH

## Technologies to be Used:

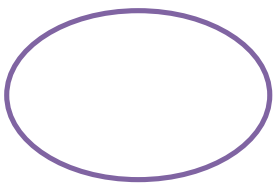
- AI integration for coding assistance
- Real-time feedback system
- User interface for split-screen coding

## Methodology & Process for Implementation:

- Step 1: Error Identification
- Step 2: AI Guidance
- Step 3: Code Analysis
- Step 4: Line-by-Line Debugging by  
-Video representation

**Image:** A flowchart illustrating the steps





# FEASIBILITY AND VIABILITY



**Title:** Feasibility and Viability

## **Analysis of Feasibility:**

- Integration with existing IDEs
- Scalability of the AI system

## **Potential Challenges and Risks:**

- Accuracy of AI recommendations
- User adaptability to AI-guided learning

## **Strategies for Overcoming Challenges:**

- Continuous AI learning and updates
- User feedback loops for improving AI accuracy

## **Image:**

- A screenshot of the Code with AI interface





# IMPACT AND BENEFITS



## Potential Impact:

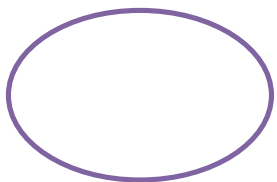
- Revolutionizing coding education
- Bridging the gap between learning and practical coding

## Benefits:

- Improved understanding of coding concepts
- Enhanced debugging skills
- Personalized learning experience
- Increased learner engagement

**Image:** A graph showing increased learner engagement





# RESEARCH AND REFERENCES



## Details / Links of the reference and research work:

• AI Tutors in Programming Education

Like(example):PYTHON TUTOR but differ like(visual rep)

Focus:

• Outlines how AI systems can support learners in coding by offering step-by-step debugging and real-time assistance

Article:

• AI Tutors in Programming Education

Research Paper:

• AI-Assisted Debugging in Programming

