

# **TOPIC : SUDOKU GAME**

## **ABSTRACT**

### **GIST:-**

The basic aim of the project is to build a sudoku puzzle for the users and provide them the right answer to the puzzle to verify whether is appropriate or not.

### **PROCEDURE:-**

The basic three principles or rules in suduko are:-

- 1) In all 9 sub matrices 3×3 the elements should be 1-9, without repetition.
- 2) In all rows there should be elements between 1-9 , without repetition.
- 3) In all columns there should be elements between 1-9 , without repetition.

Using the above conditions we build the logic for the program.

**\*Primary** aim is to generate the sudoku puzzle for the user to solve. User gets 3 options to select difficulty

- 1)Easy
- 2)Medium
- 3)Hard

Based upon his choice the empty spaces in the sudoku will be generated. As the difficulty increases empty spaces also increase.

**\*Secondary** aim is to give the solution of the generated puzzle to the user after completion of the puzzle.

The solution option is displayed on the screen for the user.

**\*Tertiary** aim is to build an interface or front end and write a suitable back end code, so that user can interact with the system and the smooth flow of the game.

For this we are going to use various programming languages like **java & python** for the back end and **html & css** for the front end and xml & Kotlin(if time permits for the entire project to be done before the deadline) for the required app development.

### **TEAM MEMBERS:**

**Sai Shyam Sundar Rao Kondu - 22B81A66A8**

**Sai Srujan Davagni - 22B81A66A9**

**Rohan Reddy Tippireddy - 22B81A6697**