

**Punyashlok Ahilyadevi Holkar  
Solapur University.**

**DEPARTMENT OF  
COMPUTER APPLICATION**

**A  
PROJECT REPORT  
ON**

**“Snakes and Ladder Game”**

**BY**

**Mr. Abhishek Shriniwas Asade**

**Mr. Mahesh Avinash Kamble**

**IN PARTIAL FULFILLMENT OF**

**M.C.A SEM- II**

**PUNYASHLOK AHILYADEVI HOLKAR  
SOLAPUR UNIVERSITY, SOLAPUR**

**(2021- 2022)**

**UNDER GUIDANCE OF**

**Dr. Chavan A.M.**



# **Punyashlok Ahilyadevi Holkar Solapur University.**

## **DEPARTMENT OF COMPUTER APPLICATION**

### **CERTIFICATE**

**Date: -**

**This is to certify that -**

Shri/ Kum. Asade Abhishek Shriniwas, Roll No.1, has satisfactorily completed the Project entitled “Snakes and Ladder Game” as prescribed by the Punyashlok Ahilyadevi Holkar Solapur University, Solapur for MCA Sem-II, during the year 2021-2022.

Project Guide

Head of  
the Department



# **Punyashlok Ahilyadevi Holkar Solapur University.**

## **DEPARTMENT OF COMPUTER APPLICATION**

### **CERTIFICATE**

**Date: -**

**This is to certify that -**

Shri/ Kum. Kamble Mahesh Avinash, Roll No.21, has satisfactorily completed the Project entitled “Snakes and Ladder Game” as prescribed by the Punyashlok Ahilyadevi Holkar Solapur University, Solapur for MCA Sem-II, during the year 2021-2022.

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the Department

# **ACKNOWLEDGMENT**

## **ACKNOWLEDGMENT**

Every project is always a scheduled, guided and coordinated team effort aimed at achieving common minimum goals. This goal cannot be achieved without the guidance of guide.

We hereby, express our heartily thanks to those persons who helped us and spend their valuable time and effort to guide us for the project work. Without their guidance and co-operation the project work would not have been successful.

This is the opportunity for us to express our honest thanks to them we would like to thanks to our **Head of Department O Computer Application, Dr. R. S. Mente.** For encouraging us to prepare this project work.

We have no words to express thanks to our project guide **Dr. Chavan A.M.** For his guidance, co-operation and interest to complete this project work. Finally, we express our deep gratitude towards our family for their model support, encouragement. Also we are thankful to our friends for their co-operation and helping nature during this period.

## **DECLARATION**

To,

The HOD,  
Punyashlok  
Ahilyadevi Holkar  
Solapur  
University,  
Solapur.

Respected Sir,

We, the undersigned student of MCA Sem- II hereby declare the project report entitled “**Snakes and Ladder Game**” written and submitted by us is our original work. The empirical binding in this report is based on the data collected by us, while preparing this project report.

Date:

Place: Solapur.

Signature

Mr. Abhishek Shriniwas Asade

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Mr. Mahesh Avinash Kamble

# PROJECT WORK



# SNAKES AND LADDER GAME

## PROJECT REPORT

### CONTENT

• Abstract.....	1
• Analysis before technical start-off.....	2
->Keywords used	
->Functional components of the project	
->Specifications	
~Hardware Specifications	
~Software Specifications	
• Introduction.....	4
• Rules.....	7
• Scope of the project.....	8
• Feasibility Study .....	9
• Diagrams .....	10
• Output.....	15
• Features ,Limitations and Future Enhancement.....	19
• Bibliography.....	21

## **Abstract of the project**

This project is aimed at developing a Multiplayer Snakes and Ladders Game. This game has been built using HTML, CSS, and JavaScript. This a game played by two to four players. The players roll the dice and based on the number they get they move up the board. The Player who reaches the finish point first wins.

### **Keywords**

#### **Specific Technology keywords**

HTML, CSS, JAVASCRIPT.

#### **Functional components of the project**

This a game played by two to four players. The players roll the dice and based on the number they get they move up the board. The Player who reaches the finish point first wins. This Game has been built using HTML, CSS, and JavaScript.

➤ **Requirements :**

**Hardware Specifications**

Operating System:-Microsoft Windows 8 and above

Processor: - Dual Core and onwards

Hard disk: - 500GB and onwards.

RAM:-4 GB

**Software Specifications**

Languages Used: HTML, CSS, JavaScript.

Software Used: Visual Studio.

# INTRUDUCTION

## SNAKES AND LADDERS

- **Snakes and Ladders** is a simple board game, for two to four players, in which the players race their token from start to finish according to dice rolls.
- The board is a numbered grid squares, on certain squares of the grid are drawn a number of “ladders” and “snakes” connecting two squares together.
- The size of the grid (most commonly 8×8, 10×10 or 12×12) varies from board to board, as does the exact arrangement of the snakes and the ladders: both of these may affect the duration of game play.

## **RULES**

- A minimum of two players and a maximum of four players can play this game.
- At the start of the game, the player's pieces are placed in the start area.
- Each of the active players shall have to wait for their turn one by one to roll the dice.
- The buttons should be moved according to the number appearing on the dice.
- Whenever the button of one player reaches the bottom of a ladder then the player can climb up the ladder to the respective position at the top of the ladder.
- If the button of one player reaches the square with a snake, the player has to retrace back to the square at the tail of the snake.
- The game is won when the button of a particular player reaches the finish point first.

## **VARIATIONS**

- To get a game started faster, some house rules, allow a player to bring his piece into play on any roll, on a 1 or a 6, or allow multiple tries to roll a 6.

## **SCOPE OF THE PROJECT**

- The game can be recreated with the graphics to make it look attractive. There is also a scope that game may have different levels. The game can also be created in such a way that it becomes more challenging...

# FEASIBILITY STUDY

## **Feasibility Study**

- A feasibility study is a short, which aims to answer a number of questions.
- Does the system contribute to the overall objectives of the Organization?
- Can the system be implemented using current technology and within given cost and schedule constraints?
- Can the system be integrated with systems which are already in place?

## **Technical Feasibility**

Technical feasibility tries to answer the following questions to make the software feasible to develop.

- The software or tools necessary for building or running the application are easily available or not?
- The compatibility amongst software exists or not?
- Are developer aware of these technologies?
- What about the alternative of these chosen technologies?

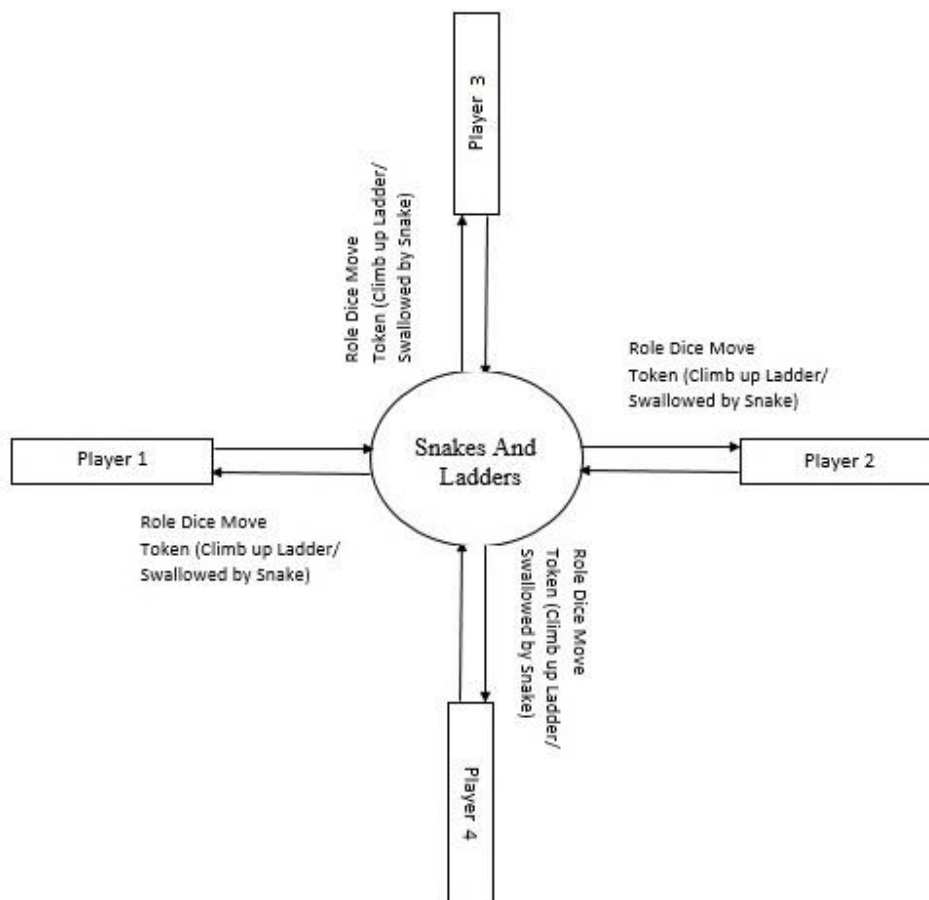


# Diagrams

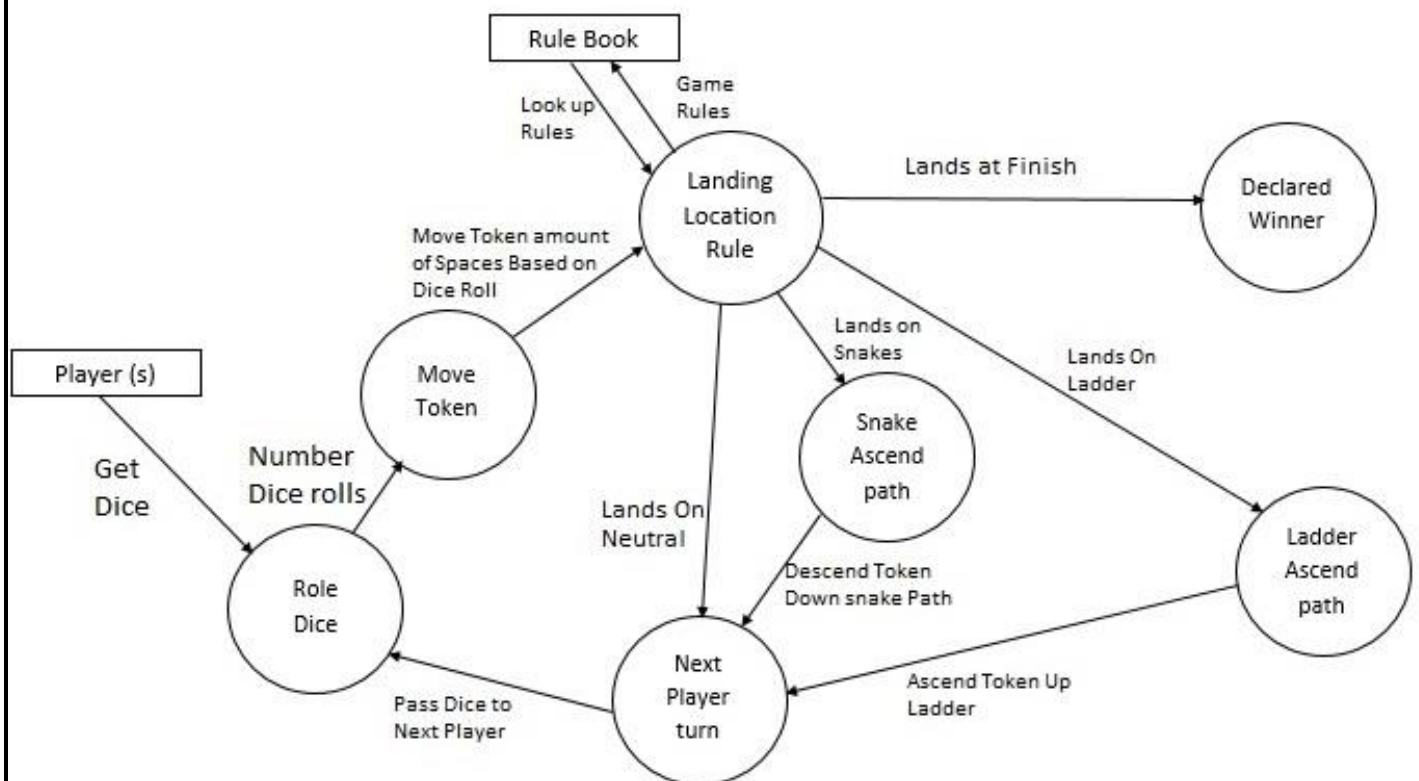
## DFD (Data Flow Diagram):

### Context Level Diagram for System

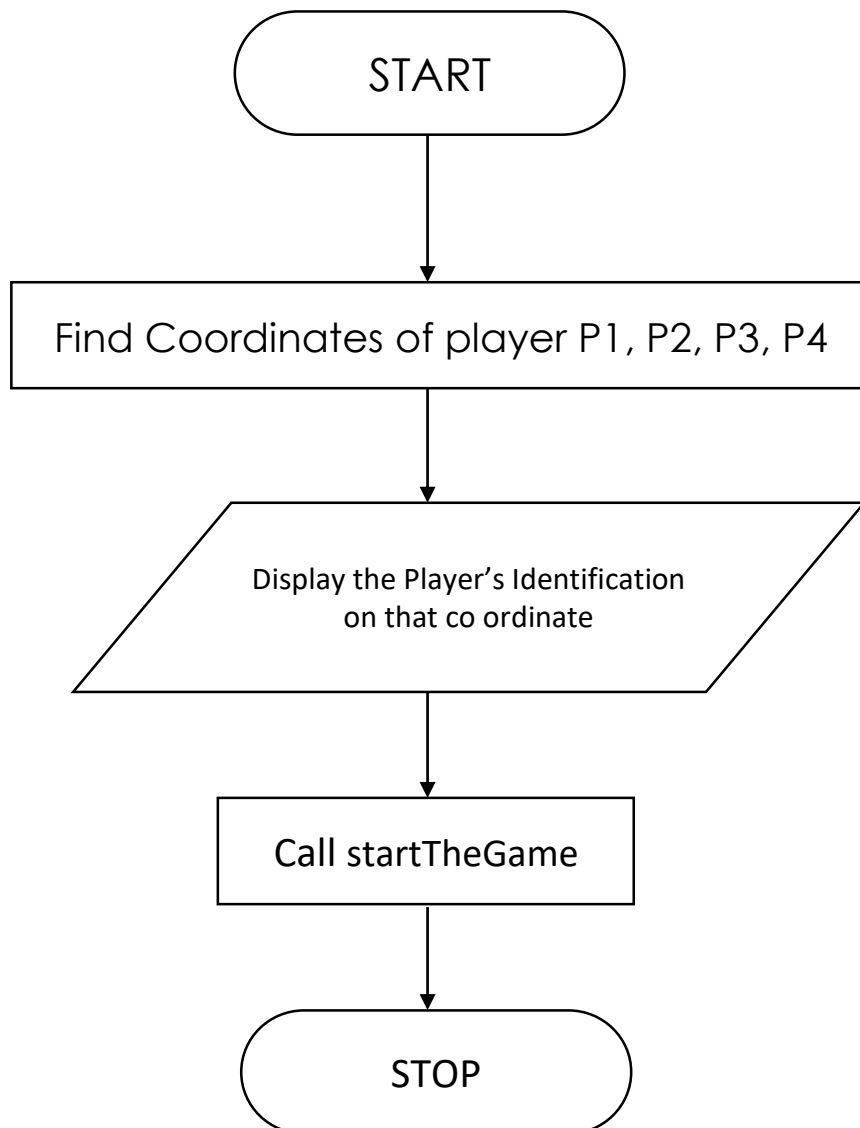
Level 0:



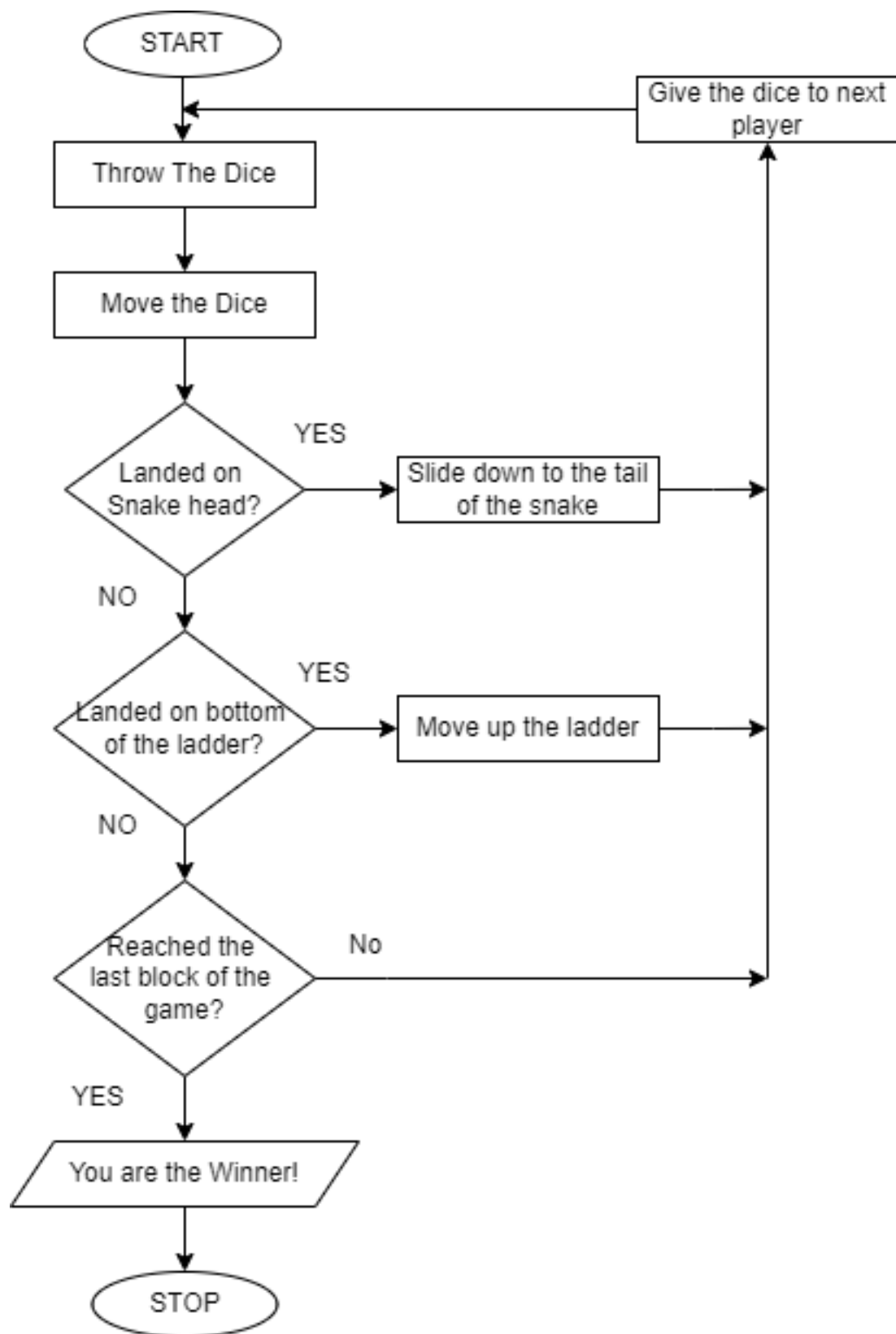
## DFD-Level 1:



## Flowchart - Level-0:



## Flowchart - Level -1:



OUTPUT

## 1. Home Page



A screenshot of a web form titled "Select No of players" on a light blue background. The form contains four radio button options: "1 player", "2 player", "3 player", and "4 player". Below these options is a button labeled "Start the Game!!".

**Select No of players**

☐ 1 player  
☐ 2 player  
☐ 3 player  
☐ 4 player

Start the Game!!

## 2. Select No of Players & Start the game



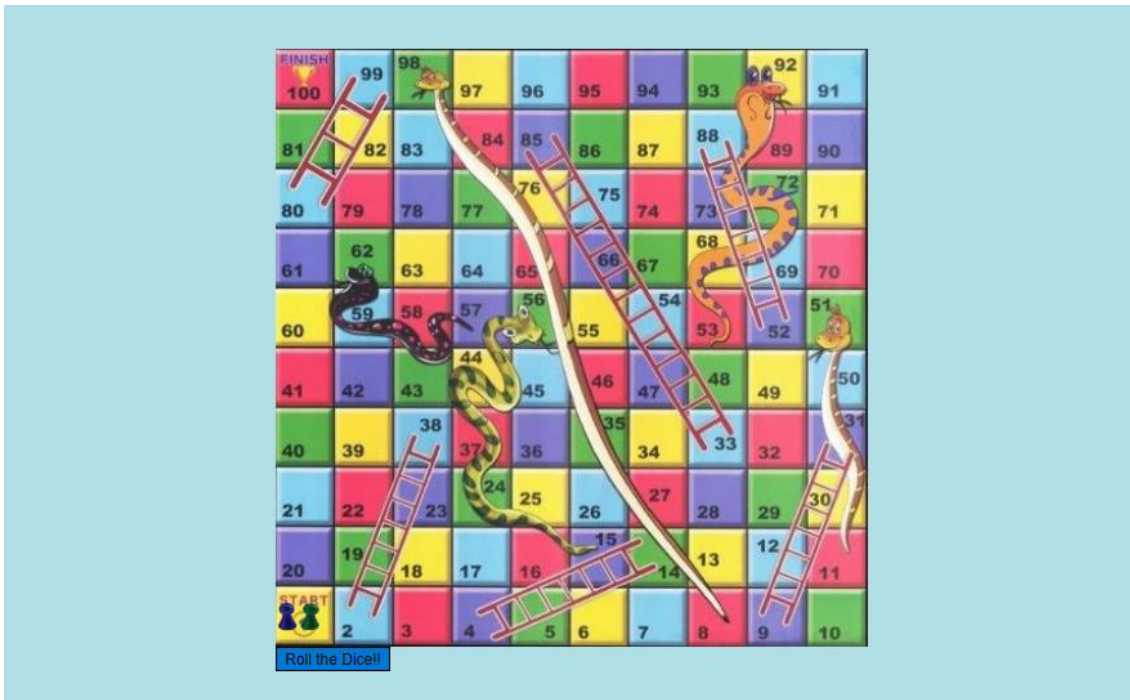
A screenshot of the same web form as in the first image, but with the "2 player" option selected. The "Start the Game!!" button is still present.

**Select No of players**

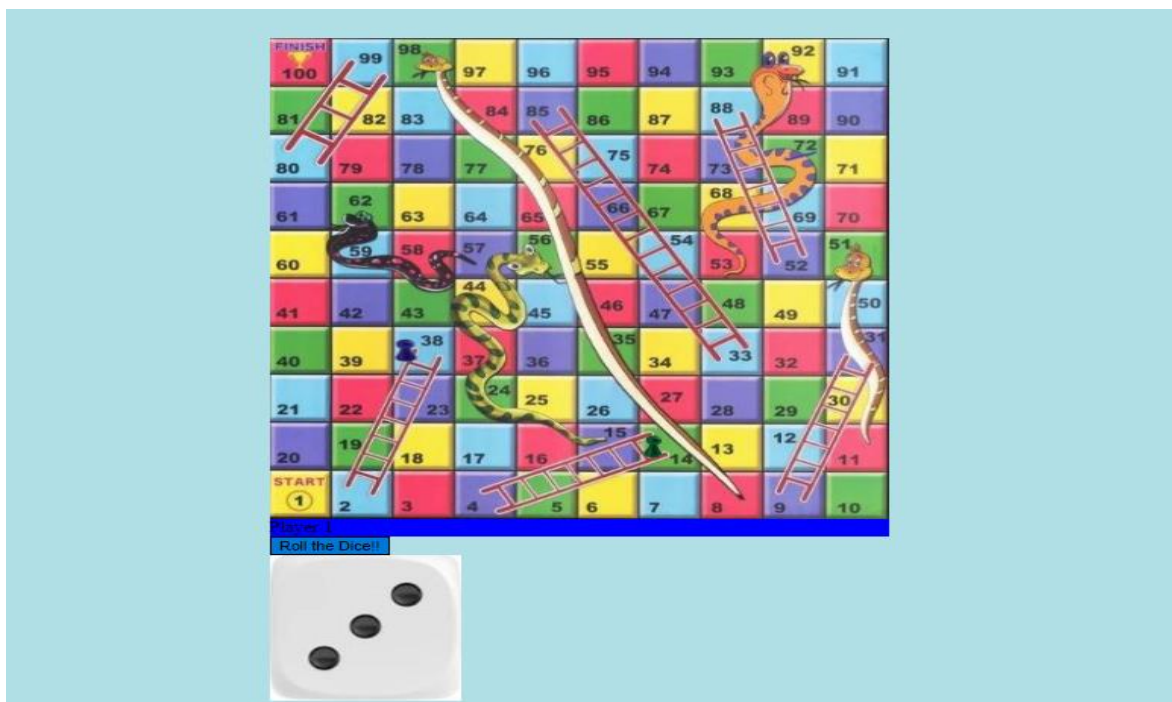
☐ 1 player  
☒ 2 player  
☐ 3 player  
☐ 4 player

Start the Game!!

### 3. Snake And Ladder Board

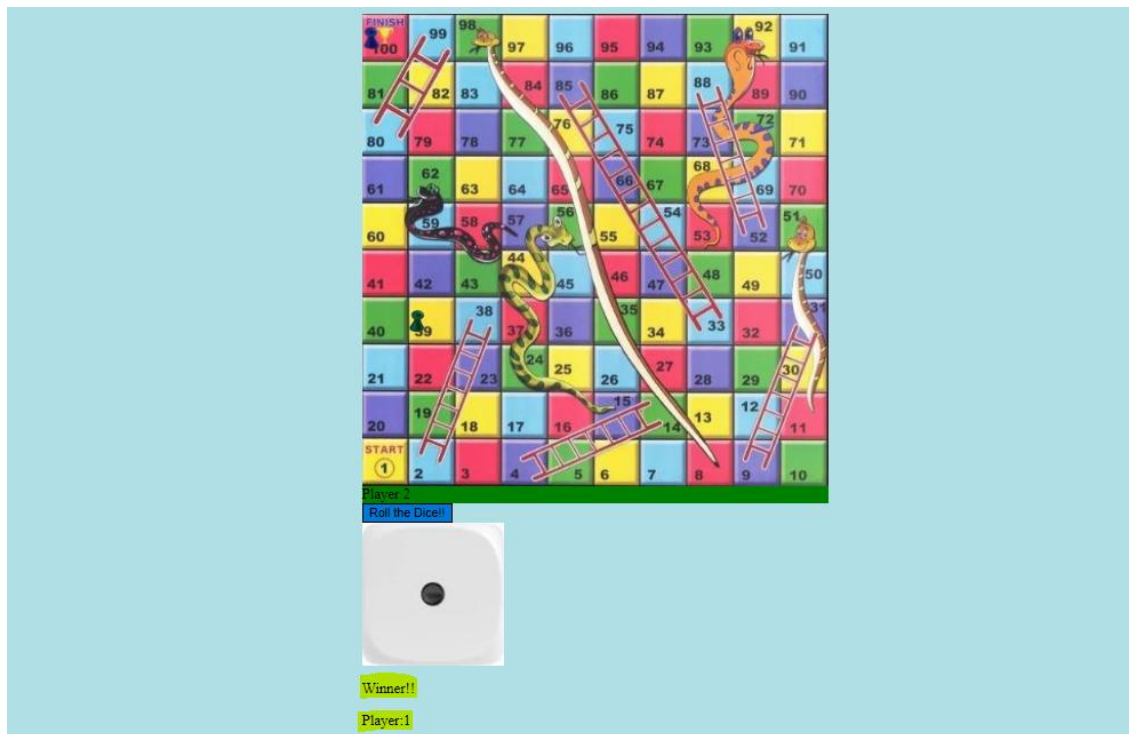


### 4. Roll the Dice





## 5. Winner



# FUTURE PROSPECTS AND LIMITATIONS

## **LIMITATIONS OF OUR PROJECT**

- The major limitation of our project is its resolution issues. It shows proper resolution in 1280 \* 1024 pixels, but in the resolution of 1280 \* 800 pixels, i.e. in widescreen systems, the software does not show the appropriate resolution.
- There is no scope to save the game. The 'save and exit' feature is not provided. This means that a previously played game cannot be reloaded.
- There is no provision to store the high scores of the previously played games.

## **FUTURE PROSPECTS**

- The limitations related to the resolution issues would be sorted out so that it supports as many different resolution schemes as possible.
- The 'save' and 'save and exit' features would be added to add more flexibility to this game.
- A provision would be made to store the high scores of the players. This would be done by making a database where the scores would be saved and stored.
- The feature of playing more than four players over LAN would be added so that multiple players can control a piece (colour).
- The feature of embedding the game into the web browser would be provided to provide traceableness to this game.

# BIBLIOGRAPHY

## Websites:-

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- [www.w3schools.com](http://www.w3schools.com)

Thank You...