

# ITCS333/473: Internet Software Development

## Assignment 4: JavaScript

### Guess the Secret Number Game

This is a traditional game that allows the user to guess the secret number (from 0 to 100) generated randomly when the user start a new game. The user can have any number of attempts but should guess the secret number before the time ends. A user will win the game if he guessed the secret number before the time ends. The time duration is controlled by the game difficulty level (60s for easy, 30s for medium and 20s for hard) as shown in the first screenshot.

Write the necessary JavaScript/HTML code to implement this game.(Tip: use the following JS statement to generate a random number between 0-100)

***randomNumber = Math.round(Math.random()\*100);***

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### Guess the Secret Number (0-100)

Difficulty Level: ☒ Easy (60s) ☐ Medium (30s) ☐ Hard (20s)

Start Game

### Guide Box

#### Tips

\* Guess a number between 0 and 100

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When the user start the game by clicking on the Start Game button, the game will shows a text box with a guess button to let the user type-in his guesses. For each guess, the game will display simple tips to tell the user that the guessed number is bigger or smaller than the secret number. In addition, the game should:

- Disable Start Game button
  - Hide difficulty level controls
  - Display the time left before the game ends in a division box (count down timer)
  - Display tips messages as follows:
    - You guessed N, try bigger number (in yellow color)
    - You guessed N, try smaller number (in red color)
    - Hooray, you won, N is the correct number (in green color and bigger font)
    - Invalid Entered Value = N (in purple), **You must use JS regular expression for validating the user input.**
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Time Left

10

## Guess the Secret Number (0-100)

Guess Here:

t43

Guess

Start Game

### Guide Box

#### Tips

\* Guess a number between 0 and 100

Invalid Entered Value = AA

Invalid Entered Value = 3333

\* You guessed 12, Try a bigger number

\* You guessed 89, Try a bigger number

\* You guessed 100, Try a smaller number

Invalid Entered Value = -7

Invalid Entered Value = t43

The game ends in the following cases:

1. Time left reaches 0 before the user guesses the correct number. In that case, an alert window message should display Time is Over, the secret number was N.
2. The user guessed the correct number before the time ended. The game should display Hooray, you won, N is the correct number (in green color and bigger font).

When game is ended, the game should stop the count down timer, hide the guess textbox and button, show difficulty level and enable the start game button, so the user can play again without reloading the page. Make sure to re-initialize your variables for new game.

Time Left

32

## Guess the Secret Number (0-100)

Difficulty Level: ☒ Easy (60s) ☐ Medium (30s) ☐ Hard (20s)

Start Game

### Guide Box

#### Tips

\* Guess a number between 0 and 100

\* You guessed 50, Try a smaller number

\* You guessed 25, Try a bigger number

\* You guessed 35, Try a bigger number

\* You guessed 45, Try a smaller number

\* You guessed 40, Try a bigger number

\* You guessed 38, Try a bigger number

\* You guessed 39, Try a bigger number

\* Hooray, you won, 41 is the correct number