

# Higher or Lower

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# Project Overview

- A number from 1-10 is displayed on the screen
- Player guesses whether the next number will be higher or lower than the current number.
- If the guess is correct, a new number is generated and the game continues.
- If the guess is incorrect, the game ends.

# Background/Motivation

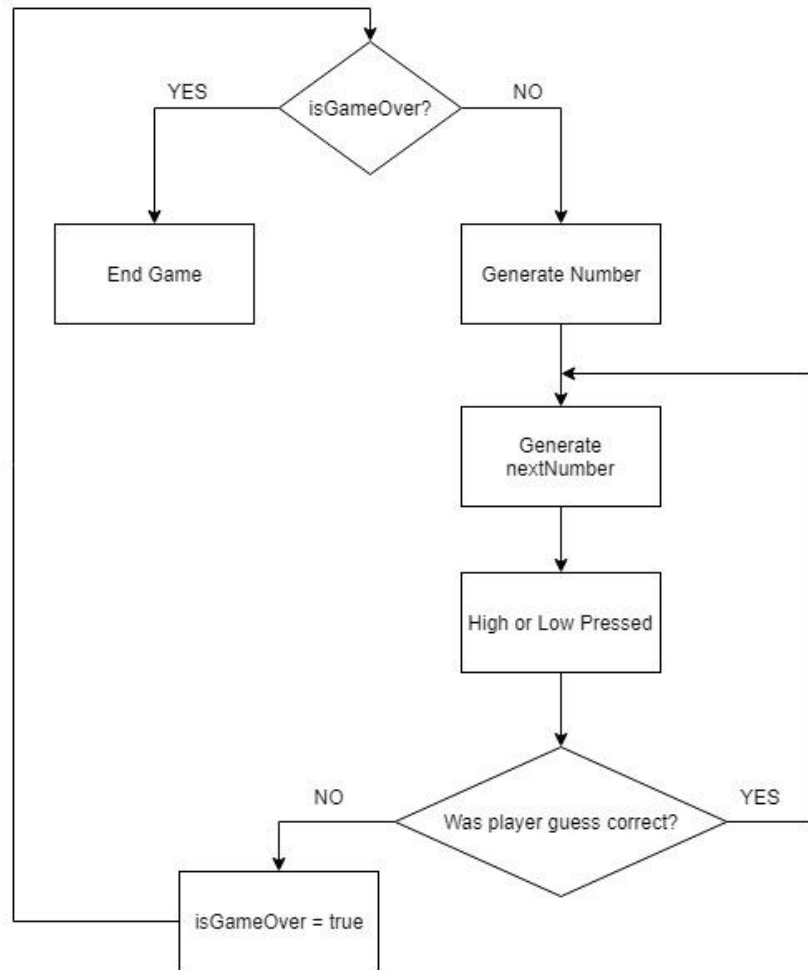
- Based off a game of chance
- Simple game design
  - But new challenge of using a microcontroller



# Design

- Tiva LaunchPad
- LCD Screen BoosterPack
- Coding in C in CCS
  - Two RectangularButtons for player decision (High or Low)
  - Canvases for title and currentNum display

# Design: Flow Chart



# Result and Challenges

- LCD Screen was slightly defective
- RectangularButton, Canvas, CanvasStruct functions and parameters
- Generating a random number on a microcontroller
  - Unable to use CPU clock

# Conclusion/Future Plans

- Implement a score tracker
  - Score earned could depend on probability of higher/lower outcome
- Introduce a betting system
  - Player can choose to wager a certain amount of points
- Use an image for the current card
- Use a built-in sensor in the microcontroller to generate the random number

Thank you!