**Proposal**

**Course:**

**Fundamentals of Digital Logic Design**

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**Project: Digital Dice with 7-Segment Display Using Arduino UNO**

**Objective:**

To create and develop a digital dice system that mimics the rolling of an ordinary 6-sided dice using a 7-segment display, push button, and Arduino UNO. The project is intended to showcase the application of digital logic and embedded systems.

**Components Required:**

1. Arduino UNO
2. 7-Segment Display (Common Cathode)
3. Push Button
4. Resistors (220Ω)
5. Breadboard and Jumper Wires

**Working Principle:**

When the push button is activated, Arduino outputs a random number from 1 to 6.

The number is output to the 7-segment display.

The generation of numbers employs Arduino's random() function, and output for display is handled by turning on the proper segments.

