Block Diagram:

Sensors will be like buttons. Inserting the coin will "open" the sensor, clicking a button that sends a signal to the uC.

User input -Coin insertion triggers sensors Using PIC16F883. 24 I/O Pins. Should only need 4 inputs. Addition will be done inside the uC, and only 1 output will be sent (at a time)

Coin value enters register based on sensor triggered PIC16F883 has a register (called the "W Register") that will be able to do the addition.

Value is added to greater sum held in microcontroller register

Device output -New value is shown on display

Might include buttons for the user that work as "anti-sensors" that remove a value once clicked. Good for if a user triggers the wrong slot

Will likely use a seven-segment display similar to a digital clock

Device size: 6in x 6in x 4.5in

Slot count: 4

Microcontroller: PIC16F883

Display: Seven Segment LED Display

Material: Unknown. Will need to check what the Makerspace has available and compare cost with durability. The chosen material won't be under too much stress, so wood could be an

option?