

# CNC Ultra-Sonic Tagging Machine Operation Flow Chart

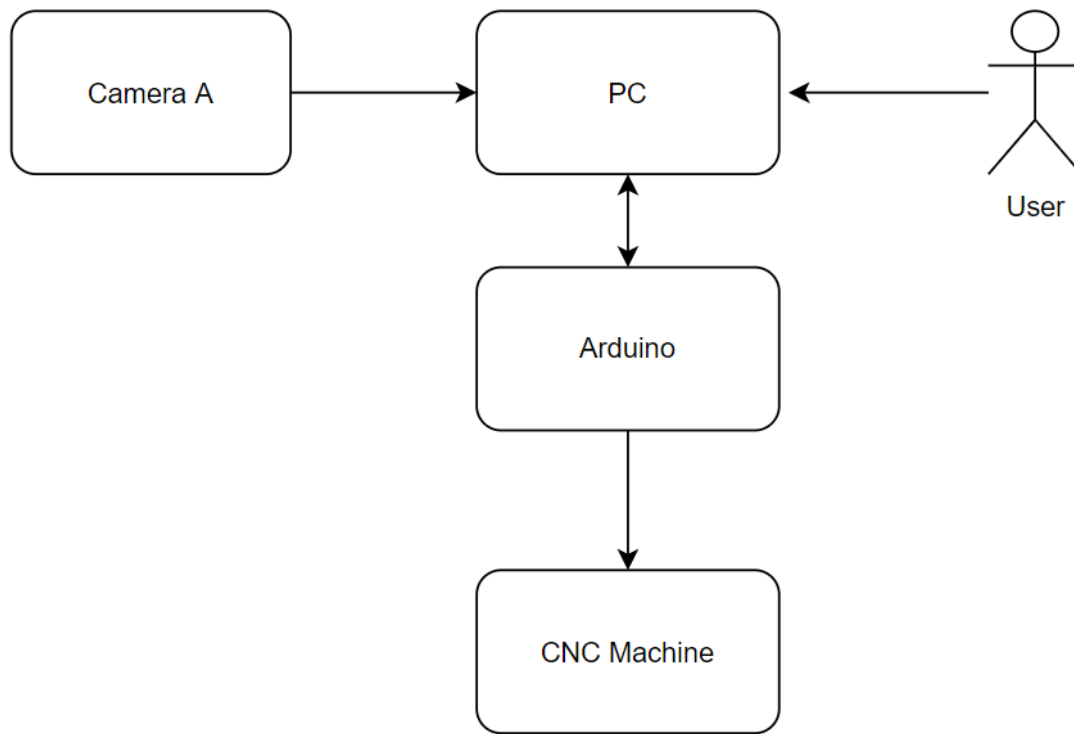


Figure 01 – Flow Chart

## **Blocks and their Functions**

- **Camera A –**
  - Capture and send the Optical data.
- **PC –**
  - Calibration.
  - Onboard Procedure.
  - Image processing and G code Generation.
- **User –**
  - Calibrate Once in a while.
  - Onboard Incoming panels (one time operation).
  - Running the program.
    - Select panel type
    - Click on screen to take image
- **Arduino –**
  - Back and forth communication with PC.
  - Send Pulses to Motor drives in CNC Machine.
- **CNC Machine –**
  - Moving ultra-sonic tag gun.
  - Tag the garment using pneumatic.

- **How the Running Operation Works**

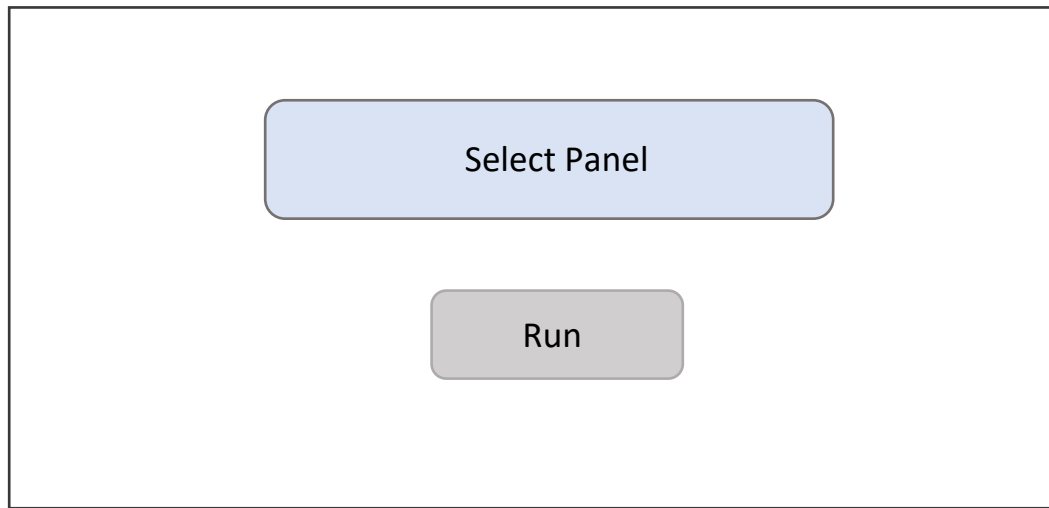


Figure 02 – Sample of the UI

- Select Panel task is a dropdown task.
- Run in the above UI is a button.
- User can place N number of panels adhering to M number of Orientations.
- After Placing panels, User clicks the Run button and everything will be Automatically work according to the need.

## **Calibration Procedure**

- Place the pre printed pattern on the bed.
- Carefully aligned to x , y movement axis.
- Follow guided Procedure on the screen.
- Entry of values clicking on the screen.

## **Onboard Procedure**

- Panels can be placed in fixed number of orientations(M).
- A guided procedure with entry of values and clicking on screen to specify tagging locations.
- Orientation specific data must be captured M times.