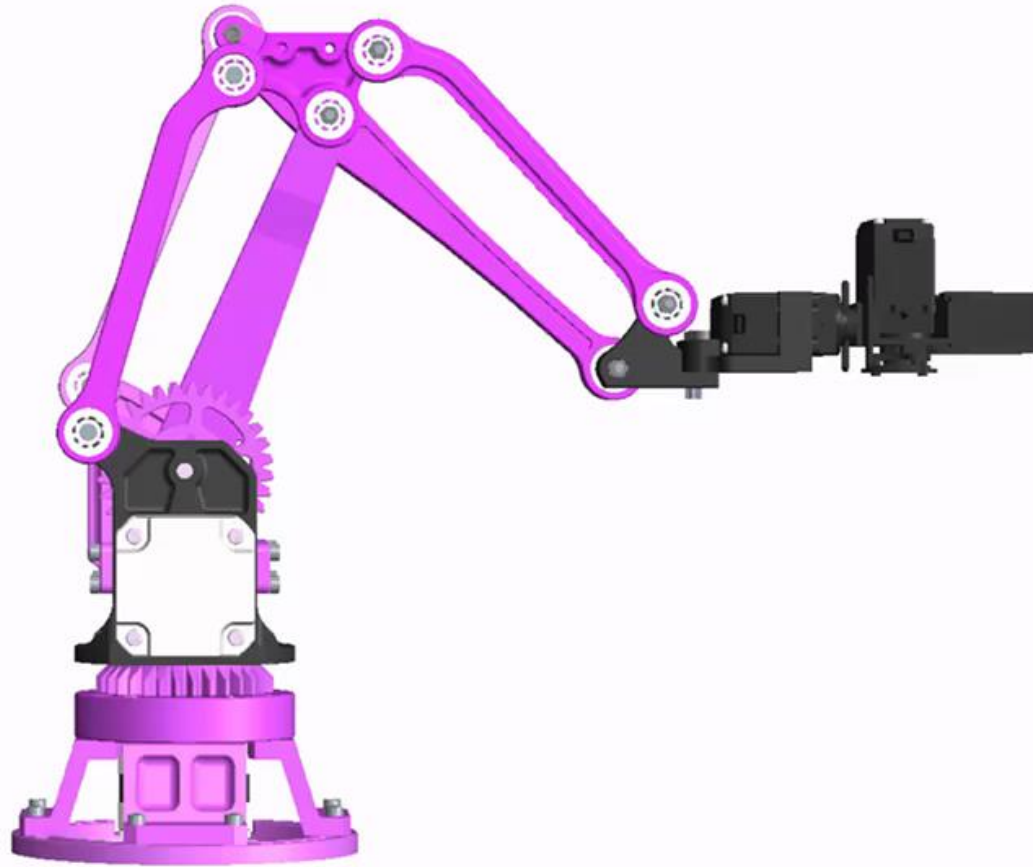
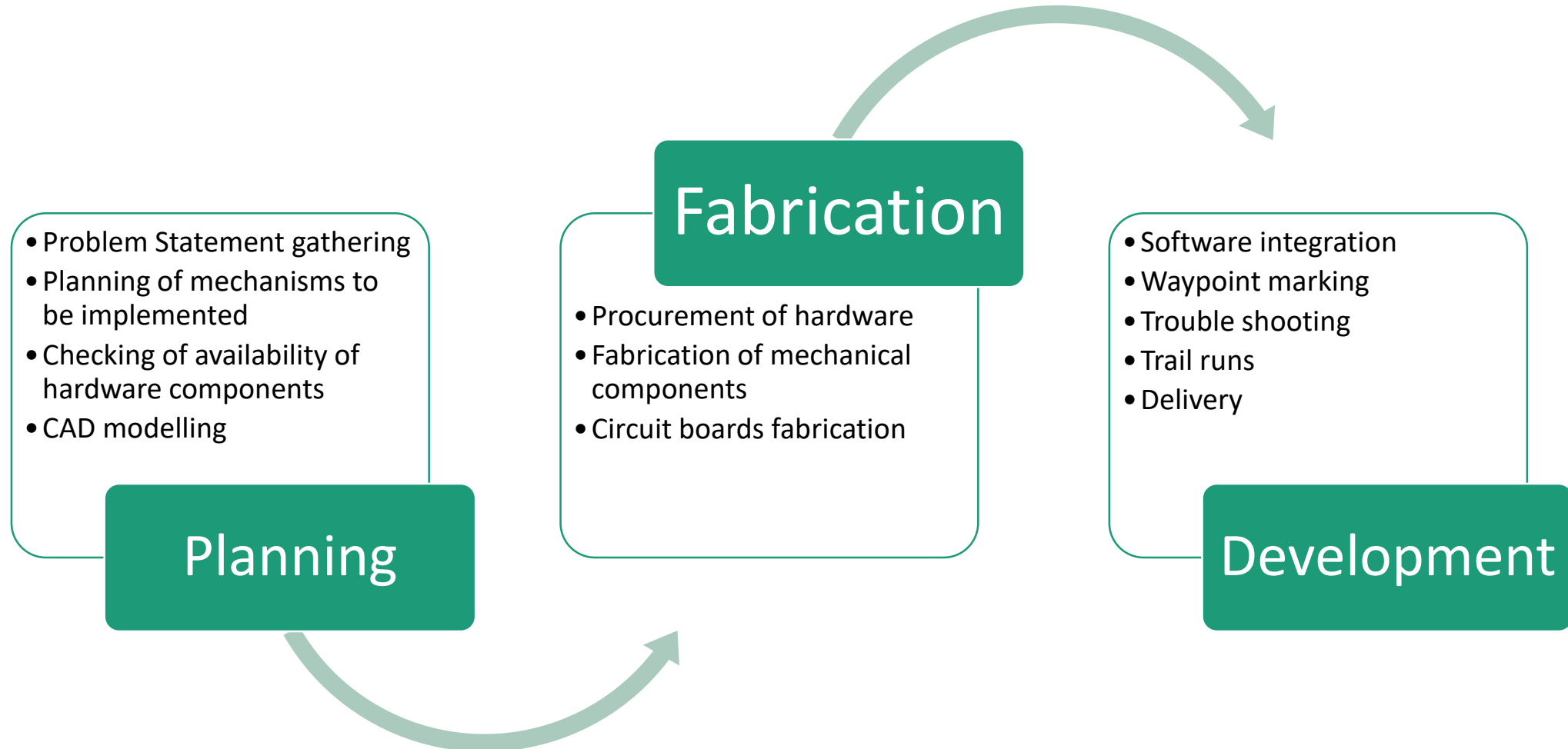


i-Arm Robot

Smart Desktop Robot Assistant



Evolution of i-Arm



Stage 1

Implementation

- i-Arm initial assembly
- Waypoint identification
- Card pick , Swipe and Place operations

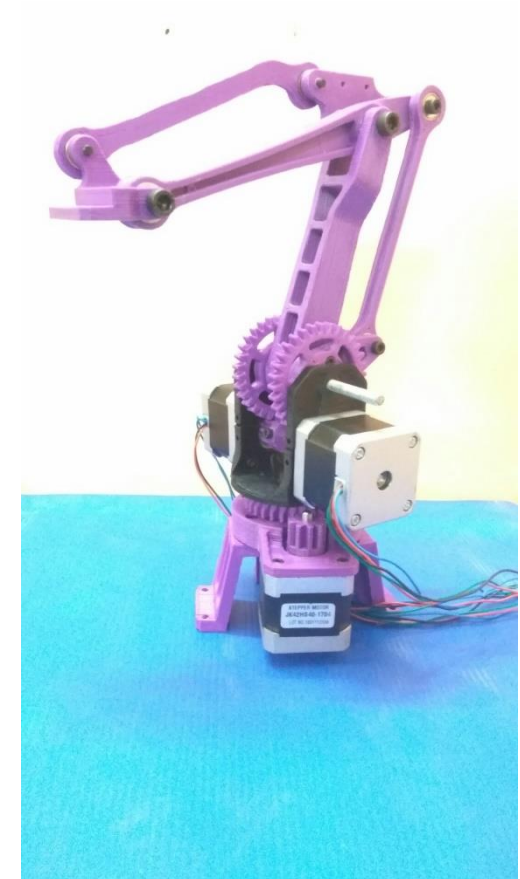


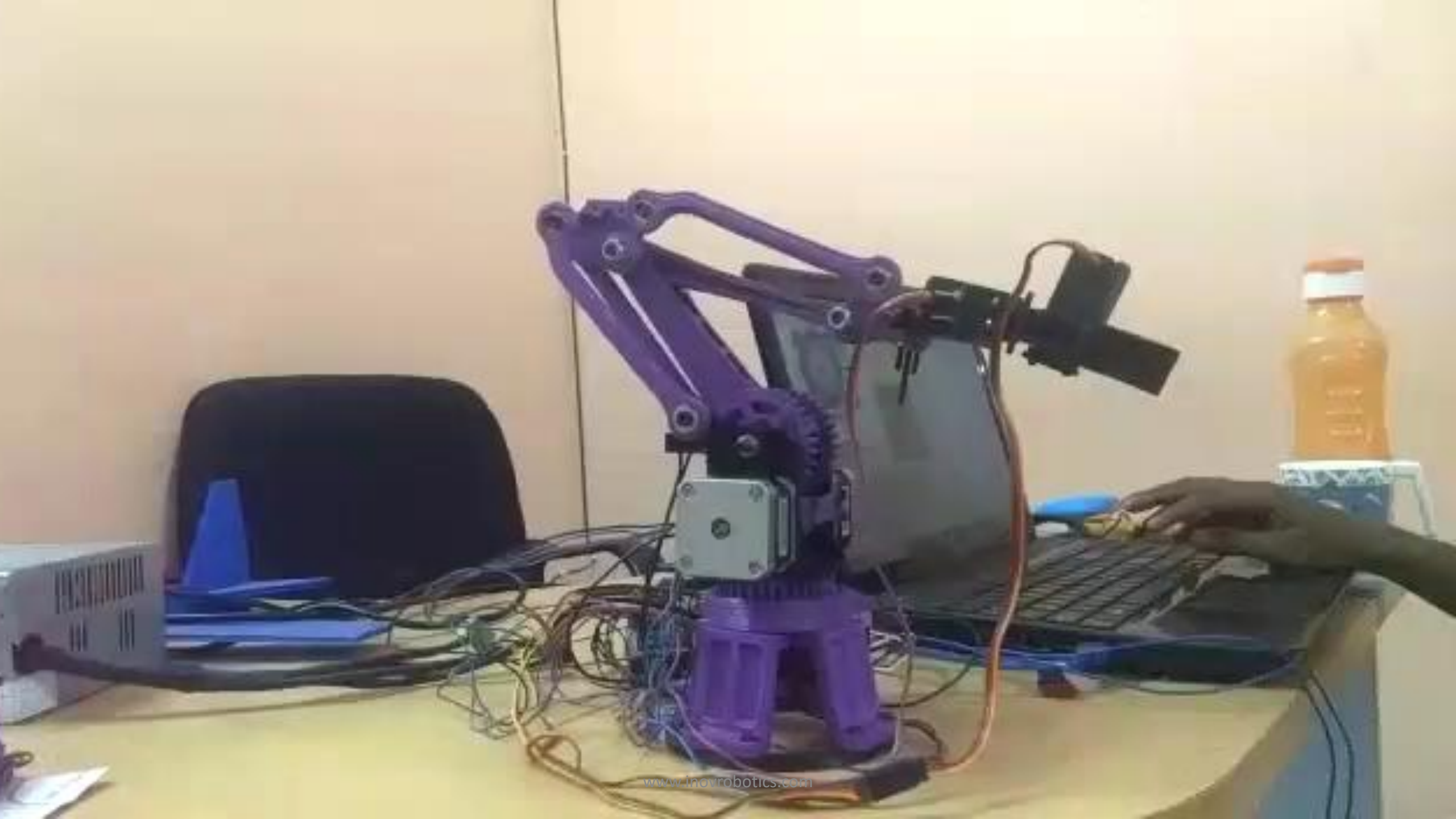
Outcomes

- Card picking and placing achieved as per plan with expected accuracy

Problems Faced

- Swipe action cannot be done because of mechanical constrains





Stage 2

Implementation

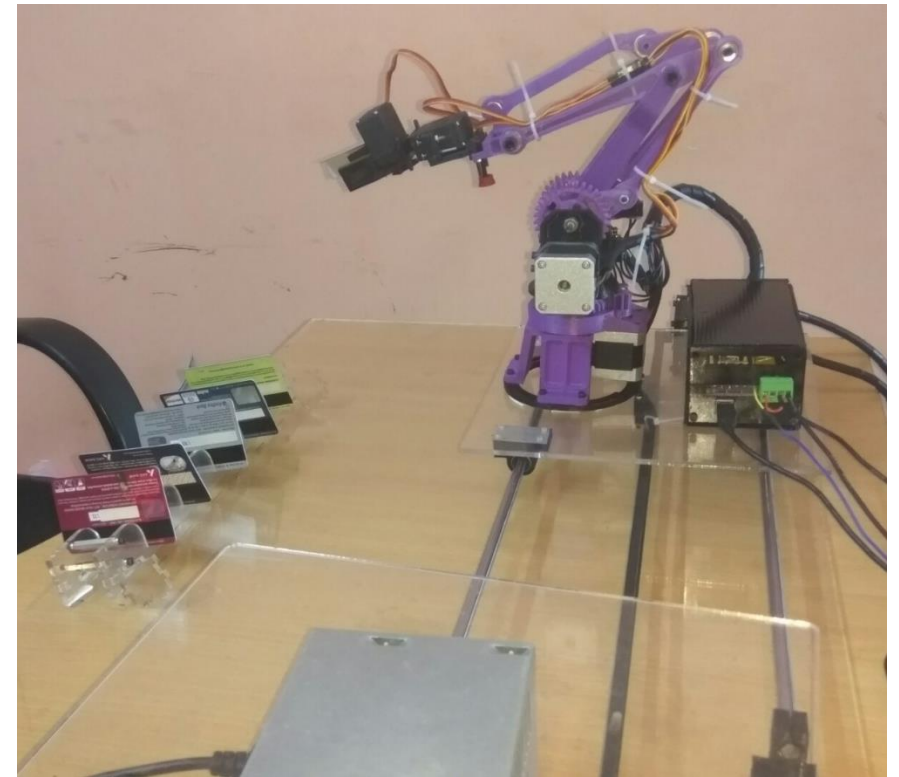
- Fixing Linear rail for arm to add a degree of freedom
- Card Rack fixed parallel to rail
- POS machine table placed adjacent to arm
- Extra provisions provide near swipe and insert slots

Outcome

- Card swiping and insert achieved successfully
- Process took 1.20 minutes to complete an action

Problems Faced

- Client requested changes in UI
- Setup does not supported for Verifone Device



Stage 3

Implementation

- Linear rail motion enabled for POS Device table also
- Complete reconfiguration of waypoints
- Changes done in UI

Outcomes

- Pick & place, Swipe, Insert, Signature drawing achieved successfully

Problems faced

- 2.40 minutes required to complete an action sequence

Stage 4

Implementation

- Waypoints optimized to reduce time
- Pauses between each action reduced to face time constrain

Outcome

- i-Arm completed a sequence within 1.30min