Autonomous Puck Handling Robot

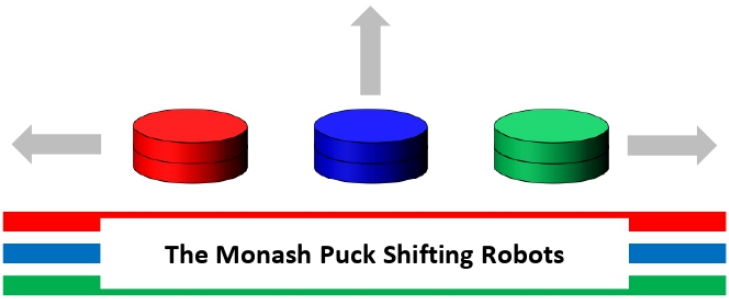
Built with

- C
- Programmable System-on-Chip (PSoC)

Achievements

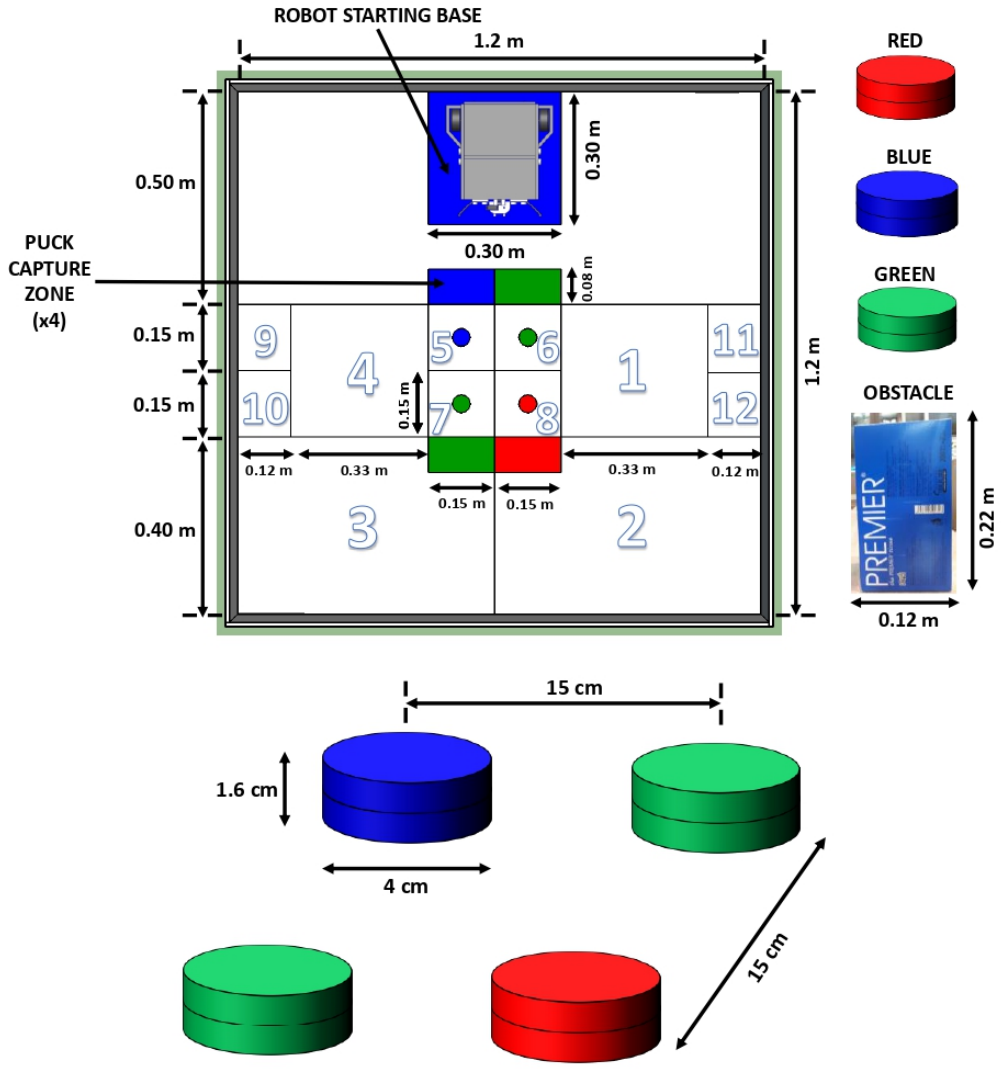
- Developed a fully autonomous robot capable of identifying puck color and transporting pucks based on their respective colors
- Programmed movement, color sensing, and puck handling functions using C

Description



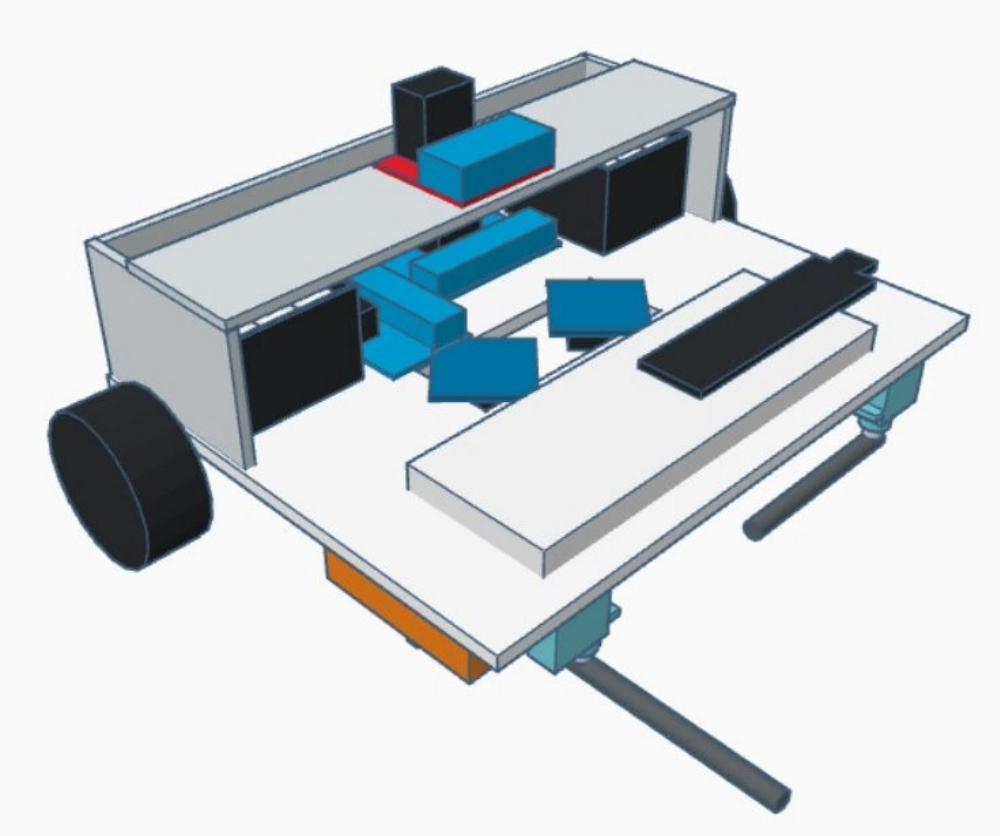
Project Description

For this semester, you are supposed to work in teams of 2 to build an autonomous robot that can shift pucks into adjacent capture zones based on their color through flicking or dragging action. A top-view of the arena is shown below.



3D View of the Robot

Details may refer to the Project Report.



Early Robot

Totally forgot to take a demonstrable photo of the final robot... So here is the very crude early robot 😃