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## Sprint Goal

Our goal for Sprint 8 will be to mount the paintball marker and finalize the program.

## Product Backlog

Backlog Item	Estimate (hours)
Mount the paintball marker	13
Electrical wiring the paintball marker	8
Programming the marker	13

# Sprint Backlog for Mounting

Backlog Item	Estimate (hours)
Print a holder for the paintball marker	4
Order a paintball marker	1
Connect the paintball marker to the PC to communicate	5
Mount the marker on to the robot arm	1
Order and mount canvas	2

# Sprint Backlog for Electrical Wiring •

Backlog Item	Estimate (hours)
Connect the electric/solenoid valve to the paintball marker	6
Wire the electric/solenoid valve to the PLC	2

## Sprint Backlog for Programming

Backlog Item	Estimate (hours)
Establish connection between GXWorks3 and RT Toolbox3	2
Program the PLC	6
Program different movements of the robot arm	3
Documentation	2

### Sprint Risks

#### Risk 1: Time constraint

Integrating all the required components together.

#### Risk 2: Schedule issues

• Mitigated by proper communication between team members, allocating enough time for project requirements.

Risk 3: Mitigated by reading documentation and reaching out to professor and TA.

Risk 4: Change of plans last minutes. (Availability and functionality of certain equipment's involved in the completion of the project).

