



ROBO CREW

SPRINT 6 PLAN

Ameen Mahouch
Akshay Paluri
Muhammad Anas
Hyunho Kim
Kundan Singh Mahato

Sprint Goal

Our goal for Sprint 6 will be initializing and configuring the general-purpose input-output (GPIO) pins of the PLC through the GXWorks3 software.

Product Backlog

Backlog Item	Estimate (hours)
Configuring PLC hardware components	12
GXWorks3 software	15

Sprint Backlog for PLC Hardware

Backlog Item	Estimate (hours)
Determining GPIO 20-pin layout	4
Wiring	1
Testing various outputs, including the FX5-8EYR/ES 8 output relay	4
Identifying and reading part manuals	3

Sprint Backlog for GXWorks3

Backlog Item	Estimate (hours)
Creating a project and module configuration	2
Verify connection through ethernet (should be complete already)	1
Creating a sequenced ladder program with I/O	6
Testing relay output	3
Test / debug program with industrial light tower	3

Sprint Risks

Risk 1: Working with high voltage, possible shorting

- Mitigated by utilizing proper wiring techniques, and complete wiring when power is off.

Risk 2: Schedule conflicts

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

Risk 3: Buildup of unknown errors, new errors arising, etc.

- Mitigated by reading documentation and reaching out to professor and TA.

Questions?
