**Sprint Review 1**

**Project:** Raspberry Pi PLC with Dobot Arm and Camera Integration  
**Sprint:** 1  
**Date:** [06.04.2025]

**Overview**

The goal of this sprint was to lay a solid foundation for the project by creating documentation, testing the Dobot IDE, and exploring relevant libraries and example projects in CODESYS.

**Achievements**

**1. Documentation**

* Compiled initial project documentation, including objectives, requirements, and a high-level system architecture.
* Documented the intended workflow for integrating Raspberry Pi as a PLC, Dobot arms for manipulation, and a camera for system monitoring.

**2. Dobot IDE Testing**

* Installed and configured the Dobot IDE.
* Successfully connected to the Dobot Magician robot arm.
* Explored the IDE’s features, including Teaching & Playback and scripting.
* Ran test programs to verify communication and basic motion control.

**3. CODESYS Libraries and Example Projects**

* Investigated CODESYS example projects relevant to Raspberry Pi and camera integration.
* Reviewed documentation and tested sample projects for web visualization and device integration.
* Identified useful libraries and resources for future development.

**Demonstration**

* Presented a live connection to the Dobot using the IDE and executed basic motion commands.
* Reviewed CODESYS sample projects and discussed their relevance to our system.

**Feedback & Next Steps**

* The research and practical testing confirmed that our hardware and software choices are suitable for the project.
* The team is ready to proceed with camera integration in CODESYS and to develop a basic Dobot control example in Python for the next sprint.