

# Sprint 3 Planning

## Sprint team members

Name	Role
Sicheng Nie	Scrum Master
Renwei Hu	Product Owner
George Wang	Architecture Lead
Siyi Liu	Development Environment Lead
	Deployment Lead

## Objectives

1. Integrate Franka Emilia to respond to issued commands.
2. Integrate demo code for voice recognition into a ROS2 node.
3. Integrate YOLO with ROS2 for 2D object detection.
4. Ensure all code is reviewed according to the set standards.
5. Upload all relevant documents for the current sprint to GitHub for versioning and collaboration.

## Sprint 3 backlog

Epic	Epic ID	Task	Sub Task	Task ID	Story Point (1-10)	Assignee	Priority	Status
General Admin	GA	Documentation Update	Finish Sprint 3 planning	GA 2.13	4 pt	All	HIGH	IN PROGRESS
			Sync Sprint 3 tasks to Trello	GA 2.14	2 pt	All	HIGH	IN PROGRESS
			Weekly Trello screenshot	GA 2.15	1 pt	Renwei Hu	MEDIUM	IN PROGRESS
			Check sprint checklist	GA 2.16	2 pt		HIGH	IN PROGRESS
			Plan for Sprint 4	GA 2.17	2 pt		MEDIUM	IN PROGRESS
		Meetings	Meeting minutes	GA 3.5	3 pt	George Wang Renwei Hu	MEDIUM	IN PROGRESS
		GitHub	Upload relevant sprint docs	GA 4.5	3 pt	All	HIGH	IN PROGRESS
		Tools documentation	Official guide (link)	GA 5.3	1 pt		LOW	TO DO
			Deprecated tools justification	GA 5.5	3 pt	Renwei Hu George Wang	MEDIUM	IN PROGRESS
		Development related	Architecture explanation	GA 9.2	3 pt		LOW	TO DO
			Project demo	GA 9.7	4 pt		HIGH	IN PROGRESS
Detect objects visually (Computer Vision)	CV	Human gesture	Integrate Openpose as a ROS node	CV 3.2	8 pt	George Wang	HIGH	IN PROGRESS
		Face detection	Integrate Openpose as a ROS node	CV 4.2	8 pt	George Wang	MEDIUM	IN PROGRESS
		3D Object detection	Set up depth camera	CV 5.2	5 pt	Renwei Hu	HIGH	IN PROGRESS
			Modify 3D print CAD model	CV 5.3	6 pt	Renwei Hu	HIGH	IN PROGRESS
Interact with the environment arurally (Voice Recognition)	VR	Background research	Create a separate account for refund	VR 1.4	1 pt	All	LOW	IN PROGRESS

## Potential risks

Risk	Mitigation
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<b>Code Integration Challenges:</b> Integrating tools like YOLO, Openpose, and ROS2 might lead to unexpected compatibility issues.	Have regular integration tests. Ensure team members are trained or familiar with ROS2 integration
<b>Voice Recognition Inaccuracy:</b> Voice recognition systems might misinterpret commands, leading to unintended actions.	Test in various environments and with different accents. Consider using established voice recognition tools or platforms.
<b>Scope Creep:</b> New features or changes might be introduced mid-sprint, leading to delays and resource overruns.	Implement a strict change management process. Any changes to the sprint should be evaluated for impact and feasibility.

Sprint planning resources

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