

# Sprint 1 Planning

## Sprint team members

| Name                        | Role                         |
|-----------------------------|------------------------------|
| <a href="#">Sicheng NIE</a> | Scrum Master                 |
| <a href="#">Renwei Hu</a>   | Product Owner                |
| <a href="#">George Wang</a> | Architecture Lead            |
| <a href="#">Siyi Liu</a>    | Development Environment Lead |
|                             | Deployment Lead              |

## Objectives

1. Review the Agile software development approach
2. Collect and organise client requirements
3. Conduct background research on relevant fields (computer vision + voice recognition)
4. Get familiar with the Robot Operating System (ROS)

## Sprint 1 backlog

| Epic   | Epic ID | Task                         | Sub Task                          | Task ID | Story Point (1-10) | Assignee   | Priority | Status      |
|--|---------|------------------------------|-----------------------------------|---------|--------------------|--|----------|-------------|
| General Admin                                | GA      | Set up essential tools       | Create Trello board               | GA 1.1  | 1 pt               | <a href="#">Sicheng NIE</a>  | HIGH     | DONE        |
|  |         |                              | Join Confluence                   | GA 1.2  | 1 pt               | All  | HIGH     | DONE        |
|  |         |                              | Create a GitHub team repository   | GA 1.3  | 1 pt               | <a href="#">Sicheng NIE</a>  | HIGH     | DONE        |
|  |         | Documentation Update         | Confluence basic structure        | GA 2.1  | 2 pt               | <a href="#">Renwei Hu</a>  | HIGH     | DONE        |
|  |         |                              | Confluence home page              | GA 2.2  | 1 pt               | <a href="#">Renwei Hu</a>  | MEDIUM   | DONE        |
|  |         |                              | Weekly Trello screenshot          | GA 2.3  | 1 pt               | <a href="#">Renwei Hu</a>  | MEDIUM   | DONE        |
|  |         |                              | Finish Sprint 1 planning          | GA 2.4  | 4 pt               | All  | HIGH     | DONE        |
|  |         |                              | Check sprint checklist            | GA 2.5  | 2 pt               | <a href="#">Sicheng NIE</a>  | HIGH     | DONE        |
|  |         |                              | Plan for Sprint 2, 3              | GA 2.6  | 2 pt               | <a href="#">Siyi Liu</a>   | MEDIUM   | DONE        |
|  |         | Meetings                     | Meeting minutes                   | GA 3.1  | 3 pt               | <a href="#">George Wang</a>  | MEDIUM   | DONE        |
|  |         |                              | Create a client meeting Zoom link | GA 3.2  | 1 pt               | <a href="#">Renwei Hu</a>  | MEDIUM   | DONE        |
|  |         | GitHub                       | Upload relevant sprint docs       | GA 4.1  | 3 pt               | All  | HIGH     | DONE        |
|  |         |                              |                                   |         |                    |  |          |             |
| Client Requirements                          | CR      | Collect project information  | Client meeting                    | CR 1.1  | 3 pt               | All  | HIGH     | DONE        |
|  |         | Organise client requirements | Do / Be / Feel list               | CR 2.1  | 2 pt               | <a href="#">Sicheng NIE</a>  | HIGH     | DONE        |
|  |         |                              | Motivational model                | CR 2.2  | 3 pt               | <a href="#">George Wang</a>  | HIGH     | DONE        |
|  |         |                              | Personas                          | CR 2.3  | 3 pt               | <a href="#">Renwei Hu</a>  | HIGH     | DONE        |
|  |         |                              |                                   |         |                    | <a href="#">George Wang</a> <a href="#">Siyi Liu</a>                           |          |             |
|  |         |                              | User stories                      | CR 2.4  | 3 pt               | <a href="#">Sicheng NIE</a> <a href="#">Renwei Hu</a> <a href="#">Siyi Liu</a> | HIGH     | DONE        |
|  |         |                              | Create consistent task ID         | CR 2.5  | 2 pt               | <a href="#">Renwei Hu</a>  | MEDIUM   | DONE        |
| Detect objects visually<br>(Computer Vision) | CV      | Background research          | Familiar with YOLO                | CV 1.1  | 4 pt               | <a href="#">Renwei Hu</a>  | HIGH     | IN PROGRESS |

|   |    |                     |                                 |        |      |             |      |             |
|---|----|---------------------|---------------------------------|--------|------|-------------|------|-------------|
| Interact with the environment arurally<br>(Voice Recognition) | VR | Background research | Natural language voice commands | VR 1.1 | 4 pt | George Wang | HIGH | IN PROGRESS |
| Integrate visual and audio inputs<br>(Decision Making)        | DM |                     |                                 |        |      |             |      |             |
| Move robotic arm<br>(Robotic Control)                         | RC | Background research | Familiar with ROS               | RC 1.1 | 5 pt | All         | HIGH | IN PROGRESS |
|   |    |                     | Research on ROS4HRI             | RC 1.2 | 4 pt | All         | HIGH | IN PROGRESS |
| Check & adjust system status<br>(System Status)               | SS |                     |                                 |        |      |             |      |             |

## Potential risks

| Risk  | Mitigation  |
|---|---|
| Ambiguous requirements  | List the most reasonable explanations considering actual scenarios of use, and further clarify during the next client meeting |
| Inconsistency between user stories and tasks listed on Trello | Use consistent epic ID and user story ID  |

## Sprint planning resources

- <https://www.atlassian.com/agile#:~:text=The%20Agile%20methodology%20is%20a,planning%2C%20executing%2C%20and%20evaluating.>
- <https://stackify.com/agile-methodology/#:~:text=Examples%20of%20Agile%20Methodology,pick%20one%20or%20two%20methods.>
- <https://pjreddie.com/darknet/yolo/>