G.U.A.R.D.

Iteration Plan

[Note: Text enclosed in square brackets and displayed in blue italics (style=InfoBlue) is included to provide guidance to the author and should be deleted before publishing the document.]

# 1. Key milestones

|  |  |
| --- | --- |
| **Milestone** | **Date** |
| Iteration start | 13.02.2017 |
| Manual Controls | 20.02.2017 |
| Collision Prevention | 24.02.2017 |
| Iteration stop | 27.02.2017 |

# 2. High-level objectives

* Create an initial android application
* Initial assembly of the Smart Car’s hardware
* Initial Smart Car controller within the app
* Display Smart Car’s battery within the app
* Set up a testing environment for the application

# 3. Work Item assignments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name or key words of description** | **Priority** | **State** | **Reference material** | **Target iteration** | **Assigned to (name)** | **Hours worked** | **Estimate of hours remaining** |
| Analog Controller | High | 100% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Joacim Eberlen | 5 | 0 |
| Initial Mobile Application | High | 100% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Justinas Stirbys | 10 | 0 |
| Bluetooth Connection | High | 75% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Boyan Dai | 15 | 5 |
| Battery Indicator | Medium | 75% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Erik Laurin | 15 | 5 |
| Collision Prevention | High | 100% | [Trello Board](Thttps://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Axel Granli | 15 | 0 |
| User Registration | Low | 100% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Gabriel Bulai | 5 | 0 |
| Test Environment | Medium | 100% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Joacim Eberlen | 5 | 0 |
| Initial sketch Arduino | High | 100% | [Trello Board](https://trello.com/b/e5XdXrO9/sprint-1) | Sprint 1 | Shaun McMurray | 5 | 0 |

# 4. Issues

|  |  |  |
| --- | --- | --- |
| **Issue** | **Status** | **Notes** |
| Lacking in communication | Addressed | Miscommunications resulted in differing understandings of the definition of done for tasks |
| Tardiness | Addressed | Team members showing up late to meetings |
| Time constraints | Addressed | Not much time could have been allocated to the project due to other courses |

# 5. Evaluation criteria

## Functional test environment

## 90% of test cases passed.

## Smart Car stops 10cm ahead of the object it would hit

## Values are transmitted over Bluetooth

## A favorable response provided by the product owners.

# 6. Assessment

|  |  |
| --- | --- |
| Assessment target | Sprint 1 |
| Assessment date | 27.02.2017 |
| Participants | Emil Alegroth, Chiara Lucatello, Mayra Soliz, Axel Granli, Boyan Dai, Erik Laurin, Babriel Bulai, Joacim Eberlen, Justinas Stirbys, Shaun McMurray |
| Project status | On Track |

## Assessment against objectives

The objectives were addressed

## Work Items: Planned compared to actually completed

All work items were addressed. It was decided to post pone User Registration and to complete Bluetooth Connection and Battery Indicator in the following iteration

## Assessment against Evaluation Criteria Test results

Bluetooth was not fully operational; therefore an already made application was used to test, since at the time it was not possible to transmit values over Bluetooth. The Smart Car managed to 10cm in front of objects before hitting them, although the responsiveness would fluctuate depending on battery level. At the time only a few test cases were developed for the application which were passed.

## Other concerns and deviations

Stakeholders seemed satisfied with the progress made. Sometime was allocated to mapping immediate surroundings using a LiDAR on a remote device