Sprint 2 Retrospective Document

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Project acronym: ROBOCON-RT

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# Sprint 2 summary

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| --- | --- | --- | --- |
| Item ID (from the previous retrospective doc) | Workpackage ID (from the Kick-off doc) | Status | Group’s comments |
| 1 | 1 | In progress | So far so good. Since we could not take delivery of devices(board, motors), we could not add them on 2-wheeled mobile robot. |
| 2 | 2 | In progress | We could not acquire the devices. They are waiting on the custom. |
| 3 | 3 | In progress | We started to examine RHexLib through examples and tutorials, wrote our own hardware and module examples using RHexLib’s hardware abstraction layer. |
| 4 | 4 | Was not on the initial plan | EtherCAT master library was installed to our computer in order to write our interface. Documentation of the userspace library provided by the EtherCAT Master library that we are going to use in our interface has been read. (Note: Our interface will use the EtherCAT Master Library’s interface). One example code was written in order to establish communication between our device and our computer by using this library. |

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# Sprint 3 plan

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| Item ID | Workpackage ID (from the Kick-off doc) | Description | Status |
| 1 | 1 | Construction of a 2-wheeled mobile robot base | Base of 2-wheeled mobile robot has been built. It has 2 wheels and a simple platform with 4 column. There is no electronic device on it yet. We are waiting for motor drives, motors and our board. |
| 2 | 2 | Choice, acquisition and integration of an EtherCAT-  capable embedded CPU and the associated real-time  Yocto Linux infrastructure | Choice of the device has already been completed however we could not get the device yet. Some paperwork will be done by the company(Teknolus) in order to get these devices. Currently we are working on a device that belongs to Uluç Saranlı for now. |
| 3 | 3 | Porting and modernization of the RHexLib software | Cross compiler options has been discussed with Uluç Saranlı. |
| 4 | 4 | Design and implementation of an abstract EtherCAT mo-  tor control interface | The design of the interface will be decided according to the requirements. For example, do we want to get the temperature of the device by using this interface? |

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# Overall progress

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| --- | --- | --- | --- | --- | --- |
|  | Sprint 1 | Sprint 2 | Sprint 3 | Sprint 4 | Sprint 5 |
| MF1 | 0% | 5% |  |  |  |
| MF2 | 0% | 60% |  |  |  |
| MF3 | 66.67% | 73% |  |  |  |
| MF4 | 0% | 10% |  |  |  |
| MF5 | 16.6% | 45% |  |  |  |
| MF6 | 0% | 10% |  |  |  |
| MF7 | 0% | 0% |  |  |  |
| MF8 | 0% | 0% |  |  |  |
| MF9 | 13% | 14% |  |  |  |
| MF10 | 0% | 0% |  |  |  |
| MF11 | 100% | 100% |  |  |  |
| MF12 | 37% | 40% |  |  |  |