**Requirements Review**

This documents shows the record of all reviews related to the requirements which are not clearly specified in the Initial requirements document of the PSS\_ACU project.

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Coach:

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Lastest update: 2017/12/06

**Log Table**

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| --- | --- | --- | --- | --- | --- |
| Revision date | Revision partner | ID requirement | Issue/Question | Solution/Explanation | New requirements generated |
| 2017/12/05 | Coach | All  (Project Scope). | The current project scope is too challenging (considering the project deadline) and implies a large number requirements (at least 300). | The project scope can be reduced in order to accomplish the project but it shall show all the phases of the software development process. The team should decide which modules are going to be implemented based on its scopes and on the time frame given. | None |
| 2017/12/06 | Coach | ACUIR\_074 | It is not specified the type of the filter that shall be performed. | The module should implement a filtering in the sampling. This is not a signal filter, it is a repetitive event filter, similar to a debounce filter for buttons reading. The specification of this filter is stated declared in the ACUIR\_083 and ACUIR\_096. | None, the filtering is specified in ACUIR\_083 and ACUIR\_096. |
| 2017/12/06 | Coach | ACUIR\_073 | It is not specified what kind of device will provide the voltage to the microcontroller. ¿Is it a real sensor or an emulated sensor? | The voltage provided by each sensors can be emulated using a trimpot or a potenciometer connected to Vcc. | ACUAR\_001 |
| 2017/12/06 | Coach | ACUIR\_073 | The range of the sensor signal is not specified. ¿What is the maximum and minimum voltage provided by the sensor? | Because the sensors can be emulated, the range of voltage is restricted to Vcc (3.3V) and Gnd (0v). | ACUAR\_002 |
| 2017/12/06 | Coach | ACUIR\_073 | It is required to read voltage signals at least greater than 20V, but the uC can not read directly such voltage levels. ¿Can we assume that a signal coupling module is provided? | The system can assume that there is another hardware module that will provide a scaled voltage signal (10% of the original voltage) for each sensor. In consequence, the new voltage are:   |  |  | | --- | --- | | Old voltage requirement | New voltage requirement | | 0V | 0V | | 2V | 0.2V | | 10V | 1.0V | | 12V | 1.2V | | 20V | 2.0V | | Modification of the requirements that concern to the sensor voltage specifications. The requirements are:  ACUIR\_077 to ACUIR\_081,  ACUIR\_084 to ACUIR\_088 and  ACUIR\_091 to ACUIR\_095 |
| 2017/12/06 | Coach | ACUIR\_077 to ACUIR\_081,  ACUIR\_084 to ACUIR\_088 and  ACUIR\_091 to ACUIR\_095 | It is not specified the tolerance in voltage specifications. | It is desirable to consider the following tolerances:   |  |  | | --- | --- | | Voltage | Voltage and Tolerance | | 0V | 0V +/- 0.01v | | 0.2V | 0.2V +/- 0.01v | | 1.0V | 1.0V +/- 0.01v | | 1.2V | 1.2V +/- 0.01v | | 2.0V | 2.0V +/- 0.01v | | ACUAR\_003 |
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