# CS2 Task 3 - Requirements

|  |  |  |
| --- | --- | --- |
| User Requirements | | |
| N° | **Roll** | **Description** |
| 1 | User | The user may replace the insulin reservoir with a new reservoir at any time |
| 2 | User | The user shall be able to see the last dose of insulin that was computed on the display |
| 3 | System | The blood sugar level shall be measured at periodic intervals |

|  |  |  |
| --- | --- | --- |
| Functional Requirements | | |
| N° | **Roll** | **Description** |
| 1 | User | User can turn pump on and off |
| 2 | System | Read blood sugar values of patient |
| 3 | System | Display blood sugar level |
| 4 | System | Administer insulin |
| 5 | System | The amount of insulin to be delivered shall be computed according to the current sugar reading as measured by the sensor |

|  |  |  |
| --- | --- | --- |
| Non-Functional Requirements | | |
| N° | **Roll** | **Description** |
| 1 | System | Simple maintenance |
| 2 | System | System has to be operational 99.99% of time |
| 3 | System | The system shall perform reliably and deliver the correct amount of insulin to counteract the current level of blood sugar |
| 4 | User | The user shall be able to use all the system functions after two hours of training |
| 5 | System | The audible alarm shall be sounded when any error condition is discovered and a diagnostic message should be displayed |
| 6 | System | On loss of power, a battery backup must ensure power for another 8 hours |
| 7 | System | The system shall be available to deliver insulin when required |

|  |  |  |
| --- | --- | --- |
| Domain Requirements | | |
| N° | **Roll** | **Description** |
| 1 |  | The user interface shall be menu driven |
| 2 |  |  |