POA Internship

**Functional Specifications internship assignment Health Concept Lab**

**Student:** Casper R. Tak

**Studentnumber:** 657313

**Client**: Rudie van den Heuvel

**Coach:** Jeroen Veen

**High School:** HAN Arnhem

**Education:** Embedded Systems Engineering

**Date:** 25-08-2022

|  |  |  |
| --- | --- | --- |
| **Functional specifications** | | |
| **#** | **MoS CoW** | **Description** |
| F1 | **M** | **The device is collecting data with the biosensor setup** |
| F1.1 | **M** | The device can detect particles |
| F1.2 | **M** | The device has a light source that provides sufficient light for the camera |
| F2 | **M** | **The device can control the temperature of the examination chamber** |
| F2.1 | **M** | The device can heat the examination chamber |
| F2.2 | **M** | The device can cool the examination chamber |
| F2.3 | **M** | The device can measure the temperature of the examination chamber |
| F3 | **M** | **The device can manipulate fluid movement** |
| F3.1.0 | **M** | The device can add fluids and remove fluids from the examination chamber |
| F3.1.1 | **S** | The fluid should be able to be moved forward and backwards. |
| F4 | **M** | **The device is able to decontaminate the examination chamber** |
| F5 | **M** | **The device needs to be able to connect to external sensors** |
| F6 | **M** | **The device must be able to be carried by men** |
| F6.1 | **S** | The device should be as small as possible |
| F6.2 | **S** | The device should be as light as possible |
| F6.3 | **W** | The device will not be battery powered |