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| Name | Description | Met/Not Met | How the design was met? |
| Availability | The system should be always available.  How the design was met  By using Firebase Realtime Database  During using the application, if any data changed in firebase database, the application should automatically display the updates without needing to refresh the page. |  | The android application can be available all time for users, once is downloaded into the mobile devices. However, the system should be connected through the Internet, in order for NodeMCU, Fiberbase, and Android devices to be connected and communicate through. For IOS user, ParQU will be accessible and available through website. |
| Performance  We can do it as inass report | Application performance must perform within a minimum response time, to meet the requirements of the QoS. |  | Even with this system prototype, the connection of the system parts together takes a short time.  With more proper sensors and system components, the performance time would not be an issue. |
| Reliability | No data loss is allowed as all the data will be saved and back up while the mobile is connected to the internet.  Data is saved at all times on the Firebase database, so no data will be lost.  As we are not saving the data locally …. |  |  |
| Connectivity | Firebase database needs to be connected to the internet to collect updated data from the sensors through the Arduino board. Also, the mobile application needs to be connected to the internet to get the data |  | Our connectivity test data |
| Efficiency  (No need) | Time taken to transfer the patient data to the firebase cloud must be as low as possible.  Time taken to send notification for doctor in emergency case must be as low as possible |  | The time taken for the patient data to be delivered to firebase takes in average 3 seconds.  The notification takes less than 3 seconds to be sent to the doctor. |
| Scalability | Our design will be handle more users in future and we can add more sensor and components to the device.  The system can support the addition of sensors and components as well as having more users and the cloud can be upgraded accordingly. |  | The system can handle large number of users just by increasing buffer size.  The MySignals board is able to work with 11 sensors, which is more than the physician needs to know about their patients.  As doctor said we can add many zone also database can be upgraded by selecting one of the pricing packages as there is a specific storage for each package |
| Usability  I think we can added because we will do acceptance testing | For the device, it must be design carefully to simplify the using of these sensors on the target patient. |  | The hardware device is easy to use since with a user interface like LCD display being carefully designed and built. Also, patient and doctor application interface are clear and easy to be used. The usability for the application was tested (see the section on testing). |
| For the user interface, which is running on the mobile app must be user friendly and easy to use by any user. |  |
| ~~Portability~~  Mobility | The application can only work in android platform.  The system can be accessed from two different platforms: an Android application and a website |  | The application built using android studio which can only be downloaded on any android device, including phones, tablets, Laptops, etc.. |
| Power | Power source needed for:  Motor: 3-7V  Sensor: 5V  Arduino: 7-12V |  |  |

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| Quality | Name | Description | Met/Not Met | Verification |
| Economic | Design Cost | Our system has multiple biomedical sensors that need to be precise in order to get precise data; where precise sensors cost higher prices than any other sensors.  The prototype for availability module which consists of 4 parking spots should cost on average 270 QR.  The prototype for reservation module should cost on average 260 QR. |  | The prototype system cost around 3867 QR, which is less than the budget we received from university. |
| Social | Usability | A normal user with minimal software knowledge should be able to use the mobile application and the website with ease |  | Acceptance testing |
| Sustainability | Maintenance | The system’s component should be easy to replace, remove and implement. |  |  |
| Manufacturability | Transport | The sensors and Arduino are organized and packaged in one box. |  | The hardware components of the system are grouped and packed in a one box, which is easy to carry anywhere. |
| Quality | Performance | The system should provide efficient information and accurate readings from the parking area. |  |  |