|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2018** | | | | |
|  | March | April | May | June | July |
| **1. Analysis of proposed system** | | | | | |
| 1.1. Studying the problem, research and selection of possible solutions | **10 h** |  |  |  |  |
| 1.2. Studying RFID technology | **10 h** |  |  |  |  |
| 1.3. Studying NativeScript technology | **10 h** |  |  |  |  |
| 1.4. Studying MongoDB best practices |  | **10 h** |  |  |  |
| 1.5. Studying Socket.IO technology |  | **10 h** |  |  |  |
| 1.6. Learning how to connect different devices in a network |  | **10 h** |  |  |  |
| **2. Implementation** | | | | | |
| 2.1. Programming mobile application with NativeScript | **40 h** | | | |  |
| 2.2. Creating a MongoDB database |  | **5 h** |  |  |  |
| 2.3. Connect mobile application with MongoDB server (HTTP request/response) |  | **10 h** | |  |  |
| 2.4. Connect mobile application with MongoDB server (Socket.IO) |  |  | **10 h** | |  |
| 2.5. Connect Matlab program to MongoDB database |  |  | **10 h** |  |  |
| 2.6. Establish a LAN between all components (Laptops, RFID reader) |  |  | **10 h** |  |  |
| 2.7. Establish a WIFI between MongoDB database and smartphones/tables |  |  | **5 h** |  |  |
| **3. System testing** | | | | | |
| 3.1. Device testing |  |  | **30 h** | | |
| 3.2. Functional tests |  |  | **20 h** | | |
| 3.3. Regression tests  3.3.1. Real time testing |  |  |  | **20 h** | |
| 3.4. Tests in HUCA |  |  |  | **10 h** |  |
| **4. Analysis of results** | | | | | |
| 4.1. Conclusions and analysis of proposed system |  |  |  |  | **20 h** |
| **5. Elaboration of document** |  | **10 h** | **10 h** | **15 h** | **20 h** |