

Work Breakdown Structure

- | | | |
|---|------------|-----------|
| 1. Raspberry Pi | | |
| 1.1 QT Application | Yasir | |
| 1.1.1 Designing UI | | Week 1 |
| 1.1.2 Python Code | | Week 2 |
| 1.2 Communication | Harsimran | |
| 1.2.1 Communications with RFID reader (SPI) | | Week 2 |
| 1.2.2 Communications with AWS server (MQTT) | | Week 3 |
| 1.2.3 Signaling to the bike docks | | Week 2 |
| 2. AWS Services | | |
| 2.1 AWS Dynamo DB | Harsimran | Week 1 |
| 2.1.1 Table for login details | | |
| 2.1.2 Table for Dock availability | | |
| 2.2 AWS Simple email service / Simple messaging service | Yasir | Week 3 |
| 2.3 AWS S3 | Sharanjeet | Week 1 -2 |
| 3. Webpage | | |
| 3.1 Designing | Sharanjeet | Week 3 |
| 3.2 Communication | | |
| 3.2.1 HTTP server (Web Socket) | Sharanjeet | Week 3 |
| 3.2.2 Communication Dynamo DB | Harsimran | Week 3 |
| 4. Integration | | |
| 4.1 QT application with database | Harsimran | Week 4 |
| 4.2 QT application with RFID | Yasir | Week 4 |
| 4.3 Webpage with database | Sharanjeet | Week 4 |
| 5. Testing | | |
| 5.1 QT application | Yasir | Week 5 |
| 5.1.1 Interfacing with raspberry pi | | |
| 5.1.2 Interfacing with database | | |
| 5.2 Webpage | Sharanjeet | Week 5 |
| 5.2.1 Webpage hosting on S3 | | |
| 5.2.2 Webpage interfacing with database | | |
| 5.3 Database | Harsimran | Week 5 |
| 5.3.1 Communication between UIs via database | | |
| 5.4 Raspberry Pi | Harsimran | Week 5 |
| 5.4.1 RFID interfacing | | |
| 6. Deliverables | | |
| 6.1 Report | | |
| 6.2 Project Code | | |