1. **Report No.1 Introduction**
2. **Project Information**
3. **Introduction**
4. **Current Situation**
5. **Problem Definition**
6. **Proposed Solution**

**5.1 Feature functions:**

* Web app: For Staff only.
* Management routing: edit information.
* Notify new update data from server to staff: when have new, background system will notify to staff.
* Background:
* Check new data periodically: Background system will check new data after one day When new data is coming. Write to temporary data and notify to staff about new data.
* Mobile app:
* Find bus route through two point: user inputs start point and end point. Application will find the best bus route from start point to end point which has the shortest distance.
* Find Bus route through 4 points: user inputs start point, two middle point and end point. Application will find the best bus route from start point through two middle point to end point which has the shortest distance.
* Find Bus route through 4 points with optimize: user inputs start point, two middle point and end point then choose optimize option. Application will find the best bus route from start point through three point which has the shortest distance.
* Find motorcycle route through two point: user inputs start point and end point. Application will find the best bus route from start point to end point which has the shortest distance.
* Find motorcycle route through 4 points: user inputs start point, two middle point and end point. Application will find the best bus route from start point through two middle point to end point which has the shortest distance.
* Find motorcycle route through 4 points with optimize: user inputs start point, two middle point and end point then choose optimize option. Application will find the best bus route from start point through three point which has the shortest distance.
* Wear app:
* Bus:
* Notify when next station coming: when bus drive nearly one of station. Application will herald name of station 2 minutes and will notify again 1 minutes later with normal sound.
* Notify which bus station should take off: when bus drive nearly station of plan. Application will herald name of station 2 minutes and will notify again 1 minutes later with special sound.
* Notify which bus should take on: when bus drive nearly station of user. Application will herald name of station 2 minutes and will notify again 1 minutes later with normal sound.
* Motorcycle:
* Notify when come to next location: when user drive nearly one of location. Application will herald name of station 2 minutes and will notify again 1 minutes later.

**5.2 Advantages and disadvantages:**

* Advantages:
* Support optimization passes through multi points.
* Support on smart wear, they can look up information easy. Don't need to use mobile phone. Decreased ability to stolen.
* Disadvantages:
* Smart wear has high price and these screen is slightly small, hard to use for newbie.
* Have not supported directly from the transportation office as other applications, so accurate data are limited.

1. **Functional Requirements**
2. **Role and Responsibility**