**Non-functional requirement**

1. **Compatibility**

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| **Requirement#:NF: 1** | **Requirement Type**: Compatibility | **Use Case:#NONE** |
| **Description:** The system should adopt the normal vision of Android system to develop. | | |
| **Rationale:** Users of different vision of Android should be used to the program. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:** Different users of vision can access or use the system successfully. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Efficiency**

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| **Requirement#:NF: 2** | **Requirement Type**: Efficiency | **Use Case:#NONE** |
| **Description:** The system is easy to use and operate. | | |
| **Rationale:** Simplifying the design of structure, interface and buttons. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:** Through using simple structure, interface and buttons, Reducing the respond time and calculating time. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Fault tolerance**

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| **Requirement#:NF: 3** | **Requirement Type**: Fault tolerance | **Use Case:#NONE** |
| **Description:** The system can deal with some running time errors. | | |
| **Rationale:** At the time of occurring errors, the system should continue running or stop. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:** Based on different type of errors, the system should be able to handle the errors. When errors occurring, the system should go back to the security blocks or response the error messages. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Privacy**

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| **Requirement#:NF: 4** | **Requirement Type**: Privacy | **Use Case:#NONE** |
| **Description:** The system should protect users’ individual information. | | |
| **Rationale:** Users do not input any individual information. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:** For protecting users,   1. The system does not allow login and any input. 2. The system does not return user’ location. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Reliability**

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| **Requirement#:NF: 5** | **Requirement Type**: Reliability | **Use Case:#NONE** |
| **Description:** The system should be able to recover from failure after no more than 24 hours. | | |
| **Rationale:** The system should handle some failures. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:**   1. In the normal network connection, the system should be used and worked fluently. 2. The system should fix problems and return to safe blocks. 3. After testing, the bugs should less than 3. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Accuracy**

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| **Requirement#:NF: 6** | **Requirement Type**: Accuracy | **Use Case:#NONE** |
| **Description:** The system should receive and produce correct information and data. | | |
| **Rationale:** The system should be able to find the correct way during navigation. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:**   1. The system should find the user’ location. 2. The system should display a correct way or route. 3. The system should make sure the location of label. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Performance**

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| **Requirement#:NF: 7** | **Requirement Type**: Performance | **Use Case:#NONE** |
| **Description:** The system should perform well in running, testing and data operating. | | |
| **Rationale:** This requirement divided into running performance and testing performance. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:**   1. The response time of every action should be in 10 seconds. 2. The time of interface exchange should be in 3 seconds. 3. The time of uploading and downloading should be less than 15 seconds. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Stability**

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| **Requirement#:NF: 8** | **Requirement Type**: Stability | **Use Case:#NONE** |
| **Description:** This requirement is related to security level in the program. | | |
| **Rationale:** The system ensures the normal operation of program. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:**   1. This system should have high level stability which means there is less running time error inside. 2. This system should not damage the hardware of the platform. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |

1. **Testability**

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| **Requirement#:NF: 9** | **Requirement Type**: Testability | **Use Case:#NONE** |
| **Description:** The system should be tested easily. | | |
| **Rationale:** When facing the problems, they should be easy to fix. | | |
| **Source:** Administrator, Moderator, User | | |
| **Fit Criterion:** The system should be test easily, it does not damage the stability of Android system as well. | | |
| **Dependencies:** None | | |
| **Rank of importance:** Essential | | |
| **Supporting Materials:** None | | |
| **History: Created by Baibing Liu 15/09/2017** | | |