

# **Nonfunctional Requirements**

## **1. Usability**

- 1.1. 85% of the users must be able to find the details of the nearby car park within two minutes.

## **2. Performance**

- 2.1. The system supporting 5000 users per hour must provide 10 second or less response time in the application, including the rendering of text and images.
- 2.2. The system must display the user's search results of car parks within 5 seconds.

## **3. Security**

- 3.1. The system must make use of a hashing algorithm to encrypt the user's password.
- 3.2. The system must only process requests for personal data with an authentication token.
  - 3.2.1. The system must issue an authentication token to the user when the user successfully logs in.

## **4. Reliability**

- 4.1. The application must load within 10s after launching the application.
- 4.2. The system must perform without failure in 95 percent of use cases during a month.

## **5. Maintainability**

- 5.1. The mean time to restore the system (MTTRS) following a system failure must not be greater than 10 minutes. MTTRS includes all corrective maintenance time and delay time.

## **6. Availability**

- 6.1. The web dashboard must be available to SG users 99.98 percent of the time every month during business hours GMT.

## **7. Scalability**

- 7.1. The system must be scalable enough to support 1,000 visits at the same time while maintaining optimal performance.

## **8. Compatibility**

- 8.1. The application must support devices of the following versions:
- iOS:
    - Minimum Version: IOS 15
    - Recommended Version: IOS 16
  - Android:
    - Minimum Version: Android 11
    - Recommended Version: Android 13

## **9. Localization**

- 9.1. The system must be able to display in 4 official languages of Singapore.