## **Non-Functional Requirements:**

- 1. The interface of the app shall be readable and intuitive for the user to learn to operate, prepare inputs for, and interpret outputs of the app.
  - 1.1. The interface of the app shall be in Arial font.
    - 1.1.1. The app shall have a blinking cursor to allow the user to know where their cursor is.
    - 1.1.2. The app shall prompt the user to key in relevant information when first logged in.
  - 1.2. The texts provided by the app shall be in Arial font.
    - 1.2.1. The texts provided by the app must be clear and allow the user to read and understand it within 5seconds.
- 2. The app shall perform its functions with availability and accuracy.
  - 2.1. The app shall scan and process any uploaded images within 10seconds.
    - 2.1.1. For files larger than 10MB, the app shall scan and process the image within 20seconds.
  - 2.2. The app must have an inbuilt camera function rather than use the camera app on the user's phone.
    - 2.2.1. The image taken by the app's inbuilt camera should be editable.
  - 2.3. The nutritional information provided by the app should be correct to the nearest whole number.
  - 2.4. The nutritional information provided by the app should be editable by the user.
  - 2.5. The app shall respond within 5ms for each button on the interface that the user clicks.
- 3. The app must be able to accommodate large volumes of users and data over time.
  - 3.1. The app shall support up to 10,000 users simultaneously without crashing.
  - 3.2. The app shall support up to 10,000 API calls simultaneously without crashing.
  - 3.3. The app shall support up to 10,000 responses to users.
- 4. The app shall provide a reliable user experience for the user with minimal disruptions to the user.
  - 4.1. The app shall have a maximum downtime of 6hours during maintenance periods.
    - 4.1.1. The app shall notify the reader of any impending updates or maintenance.

- 4.2. The app shall handle up to 10,000 users simultaneously without any slowdown in performance.
- 4.3. The app shall allow users to report any faults, bugs, or significant errors such as misspellings, missing buttons, or glitches.
- 5. The app shall be updatable and maintainable after deployment.
  - 5.1. The app shall mainly run on the Android OS.
    - 5.1.1. The app should be compatible with wide range of Android devices including different screen sizes, resolutions, and versions of Android OS.
  - 5.2. The app shall receive monthly maintenance to ensure its core functions are running well without failure.
  - 5.3. The app shall receive updates whenever the developers have tried and tested the updates amongst themselves to ensure quality and reliability before releasing them to the users.
- 6. The app shall ensure the utmost protection and privacy of its users' data.
  - 6.1. The app shall be fitted with the latest security protocols to prevent security breaches.
    - 6.1.1. The app shall receive monthly security updates.
  - 6.2. The app shall secure user data entry points to ensure confidentiality and integrity of personal information.
    - 6.2.1. The app shall request for two-factor authentication upon a user's log in onto a new device.
    - 6.2.2. When entering the password, the app shall mask the password as black dots and provide the user with the option to unhide the password.
  - 6.3. The app must comply with relevant data protection laws such as Singapore's PDPA.
    - 6.3.1. The app shall request to collect user data solely for the purpose of enhancing the user experience and must not release these data to external third parties.