

Non-Functional Requirements

1 Performance Requirements

- 1.1 The application shall take within 3 seconds to load in at first time, and within 1 seconds to load in afterwards.
- 1.2 The switch between a patient and a volunteer shall take within 1 seconds.
- 1.3 The OTP shall take within 30 seconds to arrive.
- 1.4 The notification of distress signal shall be sent to volunteers nearby within 30 seconds. The route planning for volunteers shall take within 5 seconds to find short and less-traffic-jam paths.
- 1.5 The upload of certificates shall support uploading files not larger than 5mb at each upload per user. The certificates shall sync to the web admin page within 30 seconds.
- 1.6 The application shall accept a maximum of 100,000 registered users and store a maximum of 50,000 volunteers' certificates file.
- 1.7 The application shall handle a maximum of 1,500 rescue events simultaneously.

2 Safety Requirements

- 2.1 Every user is required to provide a valid phone number during the registration, and an OTP shall be sent to the user to Verify the identity.
- 2.2 The patient shall recall the call for help to prevent false triggering.
 - 2.2.1 The patient must hold up the button at the corner to stop the sending the call for help.
- 2.3 The patient shall be able to provide volunteers medical history, home address or other personal information for volunteers. This is to help volunteers learn more about the patient and execute a better rescue.
- 2.4 The first aid certificate or other valid certificate of a volunteer shall be verified and approved by administrators.
- 2.5 This application or service provided by this application must provide a platform to connect the best volunteers but no guarantee on successfulness of rescue and must not accept liability for any loss, damage, cost or expense that users may incur as a result of the use of or reliance upon this application.
- 2.6 Legal law action must be applied to users that do scamming on the Save Me button.

3 Security Requirements

- 3.1 Personal information share must be voluntary, including
 - I. Medical history or physical condition.
 - II. Home address or work address.
 - III. Emergency contact information.
 - IV. Real time GPS location.
 - V. Other possible user information.
- 3.2 The application must not leak user information.
 - 3.3.1 User information shall not be seen or used by others. The user information can be only accessed by administrators or the volunteers who are giving him/her first aid.
 - 3.3.2 User GPS location shall only be used for rescue.
 - 3.3.3 User information shall be deleted if the user account is deleted.
- 3.3 Users shall be able to manage their information.
 - 3.3.1 Users shall be able to modify or remove the personal information they shared.
 - 3.3.2 Users shall be able to disable sharing GPS location.
 - 3.3.3 Users shall be able to delete their account.

4 Software Quality Attributes

- 4.1 The application shall retain user information without asking the user to sign in again after the user's first sign up.
- 4.2 The application shall enable the hardware shortcut for patients. Patients can turn on the hardware shortcut for easier calls for help.
- 4.3 The application shall be extended in the future and the CodeMonkeys team shall maintain the system.

5 Business Rules

- 5.1 Any user in Singapore shall be able to download this application.
- 5.2 The user must use this application as a patient after finishing the registration.
- 5.3 The user must use the application as a volunteer after finishing the registration and uploading the CPR certificate or other valid certificates.
- 5.4 Only administrators are able to access the web admin page while the credentials of the web admin page are under the control of the administrator manager.