**Functional Requirements**

1. The application must allow the user to login with their Google account.   
   1. Upon logging in, the application must have a sign out option.
2. The application must request for permission before accessing the user’s location via GPS.  
   1. If permission is denied by user, the application must show a map consisting of all the CHAS certified clinics.
   2. If permission is granted, the application must be able to show a map consisting of CHAS certified clinics nearest to the user up to a maximum distance of 5km radius.
3. The application must allow users to search the location of specific clinics on the map by:  
   1. The Postal code of the clinic.
   2. The Telephone number of the clinic.
   3. The Name of the clinic.
   4. Users dragging the map manually with 1 finger to pan the map around.
4. The application must enable the user to view a list of clinics without the map.
5. The application must display more detailed information of a clinic when the user taps into any of the map markers shown on the map.  
   1. The application must display the clinic’s full name.
   2. The application must display the clinic’s full address.
   3. The application must display the clinic’s rating scores, the number of total ratings and reviews.
      1. When user taps on ratings, the application must ask user to login prior to giving a rating or leaving a review.
         1. If user is already logged in,
            1. User must be able to leave a rating out of five stars based on their experience in the clinic.
            2. User must leave a compulsory review alongside the rating.
            3. The application must accumulate the total ratings and calculate the weighted average from total users.
         2. If user is not logged in, the application must provide an informative message to the user asking them to login.
   4. The application must display the clinic’s telephone number.
      1. When the user taps on the telephone number icon, the application must seek for user’s permission before accessing the user’s phone call function.
         1. If permission is given, the application must be able to call the clinic.
         2. If permission is denied, the application must show an informative message telling the user to grant permission it.
   5. The application must display the clinic’s operating hours.
      1. When the user taps on the operating hours
         1. The application must display if the clinic is currently open according to system time.
         2. The application must display more details of the daily operating hours of the clinic.
   6. The application must be able to display a route to the selected clinic.
      1. When the user taps on the clinic’s direction button, the application must open up Google map to show possible routes of getting to the clinic.

**Non-Functional Requirements**

1. The application must be compatible with phones running Android 6.0 and above.
2. The application must fetch clinic data details within 500ms when a user taps into any clinic.
   1. If the data fetching fails, the application must retry up to 3 times before displaying an informative error message.
3. The application must be operable with either hands.
   1. User must be able perform the following functions single handily.
      1. Search for clinic (Map, List view)
      2. Call clinic
      3. Pan the map
4. The application must be functional without GPS
   1. User must be able to perform the functions without GPS
      1. Search for clinic (List view)
      2. Call clinic

**Data dictionary**

A set of terms matching with a description of the term in the context of the application.

**General terms**

|  |  |
| --- | --- |
| **Term** | **Description** |
| Map marker | An indication of where the clinic is, on the map. |
| Rating | A measure of users’ satisfaction on a particular area ranging from 1 to 5 stars where 1 depicts very unsatisfactory and 5 depicts very satisfactory. |
| Review | Comments from users describing how satisfied they are with a certain clinic. |
| User | A person who uses the application to look for clinics. |
| Search | Search for clinics based on user’s given input. |
| Km | A unit of length in the metric system: Kilometer. |
| Ms | A thousandth of a second. |