

ANNEXURE “B”

1. MOBILE APPLICATION REQUIREMENTS

The short-term plan is to release a beta version of the mobile application that is compatible to Android-run smart phones and tablets. The target date is October 2019. The final release version will be delivered by December 2019. The application is comprised of the following components; mobile apps and admin app. The core of the application work-flow is defined (Figure 1) with associated description provided thereafter (Table 1).

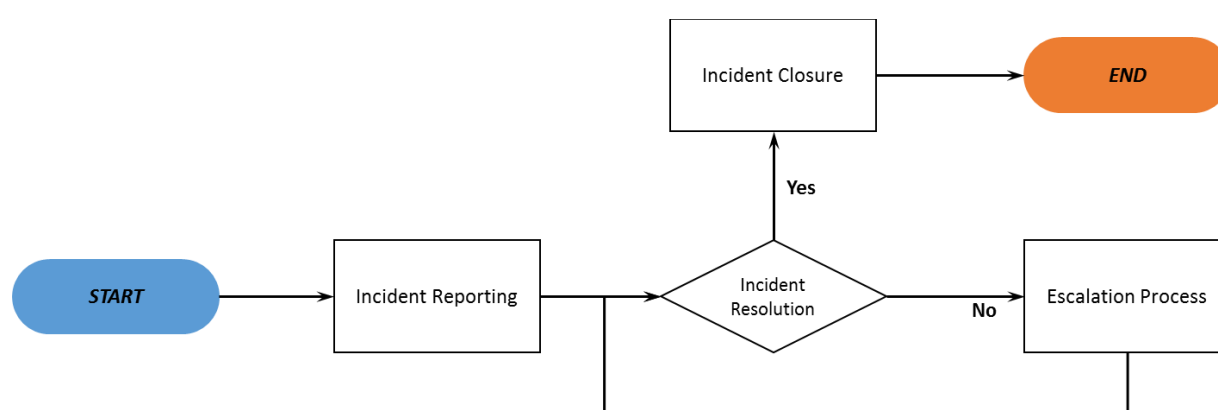


Figure 1: CARRS System flowchart

Table 1: Description / Definition of terminology for CARRS System

Incident Reporting	Input(s) :	Community / Customer (end-user) reporting an incident
	Output(s) :	Incident lodged to the relevant official database (via e-mail) and reference number allocated
Incident Resolution	Input(s) :	After querying incident (if required) and field work, official notes and action entry to CARRS database
	Output(s) :	If resolved – Official closes the reported incident [Incident Closure] and an alert message is sent to the community member / customer (end-user) Else – Official escalates incident to relevant department or senior official
Escalation Process	Input(s) :	Assigned department or senior official receives Request to escalate notice
	Output(s) :	New responsible official appointed and actions resolution
Incident Closure	Input(s) :	Official lodges Request to close the incident
	Output(s) :	Incident resolved, verified, and closed

The general requirements of the mobile application are:

1. Small sized mobile application, preferably **less than 10MB**
2. Cross-platform libraries, **at least functional on the latest release of the Android mobile client application**
3. Simple, versatile **splash screen** with mobile app name

4. Be able to select **language**, primarily English, Afrikaans, Zulu, and Sesotho
5. Provide **user registration window** to capture name, surname and mobile number
6. Develop necessary **API/services linkage** between hosting server, the end-user, and
7. Mobile App must have **built-in features for personal data protection** in compliance with POPI Act of 2013
8. Integrate **back/front-end infrastructure** to facilitate exchange of information with CARRS web-based application
9. Stand-alone **administration application** only available to the Administrator protected by a two-way authentication log-in screen. This will be based on a web client and functional on major current browsers: Chrome, Firefox, Safari, and MS Edge. Administrator will be able to generate system analytics among other services.

2. LIST OF FUNCTIONS

A simplistic view of the main screen for the different users is shown in Figure 2 and Figure 3, respectively. The application must be imbedded with push notification abilities, calendar integrations, and Google Maps API at the least. Administration privileges could be allocated based on authenticated mobile number upon registration or based on architecture currently used for web-based system.

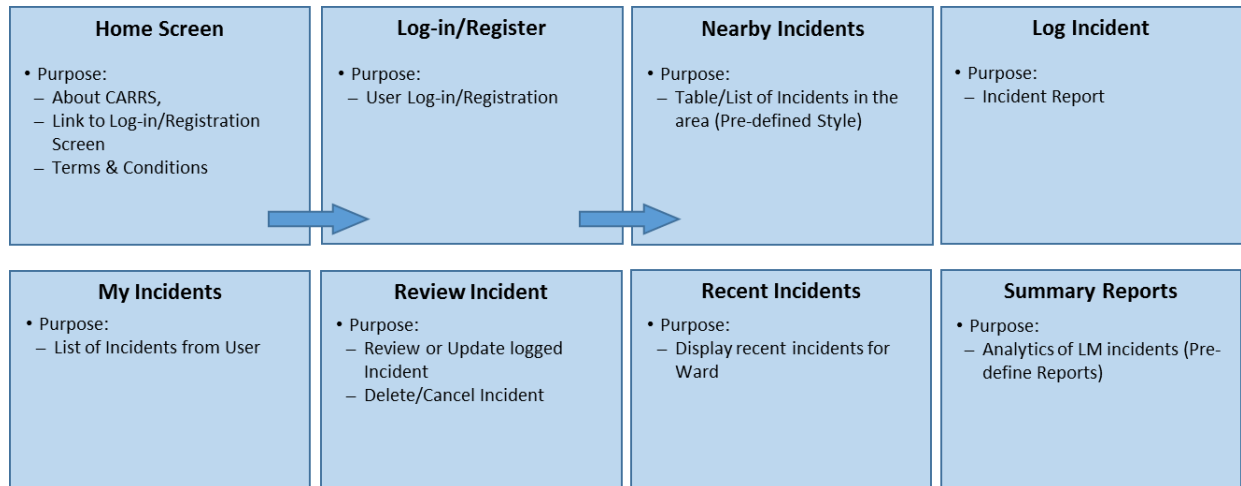


Figure 2: High-level list of functionalities for end-user access

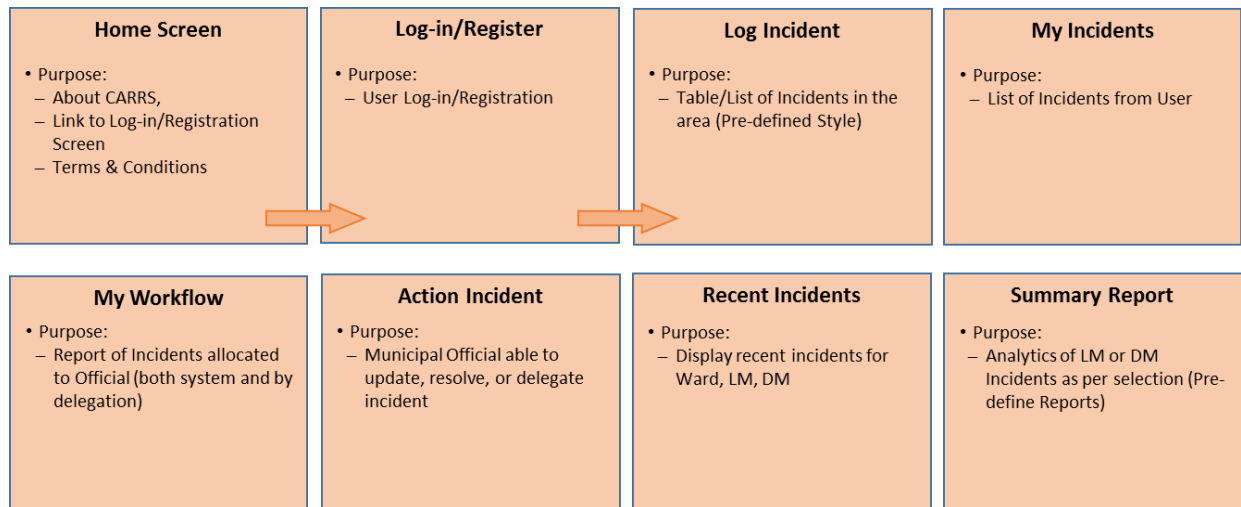


Figure 3: High-level list of functionalities for admin/official access

3. APP LIST OF FEATURES

The following list of features is essential:

- Sign-in/Registration/Log-in
- Onboarding “About CARRS App”
- Navigation
- Forms
- Product Menu
- Calendar Integrations
- Google Maps Integrations
- Push Notifications

4. PROJECT TIMELINE

It is estimated that the development of the mobile application will take a period not exceeding 4 months to reach a stage to publish an 80% stable build that has good ratings from user experience in training sessions (to be held in the fourth month) and fewer bugs remaining. After 5 months a full release version of the application will be ready for consumer distribution.

Further support is planned from a qualifying developer to fix bugs on the release for a period of 2 to 3 months after publishing for consumer market.