Software User Manual (UM)

MedFRS Device Diagnostic Software

Team 16

Misha Dowd	Project Manager
Delnaz Gundevia	Life Cycle Planner
Anfal Abdul Jaleel	System Architect
Nanda Kishore Kolleje Rao	System Requirements Engineer
Anupam Kumar	Feasibility Analyst
Jackie Cheng	IIV & V

12.9.2013

Version History

Date	Author	Version	Changes made	Rationale
12/02/13	AAJ,NK	1.0	• Added expected information in each section	• To comply with Instructional ICM-Sw standard
12/04/13	NK, AAJ	1.1	• Added Screenshots of the application	• For draft TRR
12/03/13	AAJ	1.2	• Updates	• For TRR

Table of Contents

VERSION HISTORY ..... **II**

TABLE OF CONTENTS ..... **III**

TABLE OF TABLES ..... **IV**

TABLE OF FIGURES ..... **V**

1. Introduction 1

    1.1 System Overview 1

    1.2 System Requirements 1

2. Installation Procedures 2

    2.1 Initialization procedures 2

    2.2 Re-installation 2

    2.3 De-installation 2

3. Operational Procedures 3

4. Troubleshooting 11

    4.1 Frequently Asked questions 11

    4.2 Error Codes and Messages 12

    4.3 Note 12

Table of Tables

No table of figures entries found.

Table of Figures

No table of figures entries found.

1. Introduction

1.1 System Overview

The primary purpose of the MedFRS system is to save more lives by introducing the secure propagation of information during emergency situations. It allows authorized volunteers to record the data of victims they categorize and transmits and collates this information so that it can be used by the Supervisors to guide the EMTs and inform them of what to expect, thus saving critical time during the emergency response. The system generates lists of victim information and location.

1.2 System Requirements

1.2.1 Hardware Requirements

a. A laptop with internet access
b. An iPhone with iOS 6 or higher

1.2.2 Software Requirements

Laptop -
a. Internet browser
iPhone –
a. MedFRS application

1.2.3 Other Requirements

- BP cuff
- Wristbands representing different triage categories with barcodes printed on them.

2. Installation Procedures

2.1 Initialization procedures

Download the MedFRS application from the app store and install the Application.
When the app runs for the first time, there will be a prompt to enter the One Time Pass(OTP) into the application. One Time pass will be given to the user in a separate mail on registering with the system. On entering the OTP, if the authentication is successful, then the application will be valid and henceforth no authentication or login mechanism is required

2.2 Re-installation

If an App is reinstalled on the smartphone then the OTP can be reused again to authenticate, if the OTP has timed out then a new OTP can be requested by the user.

2.3 De-installation

Application can be uninstalled from the smartphone whenever necessary

3. Operational Procedures

a. Login

1. Go to the website and click “Sign In” from the top bar.
2. Enter Username and Password and click Login

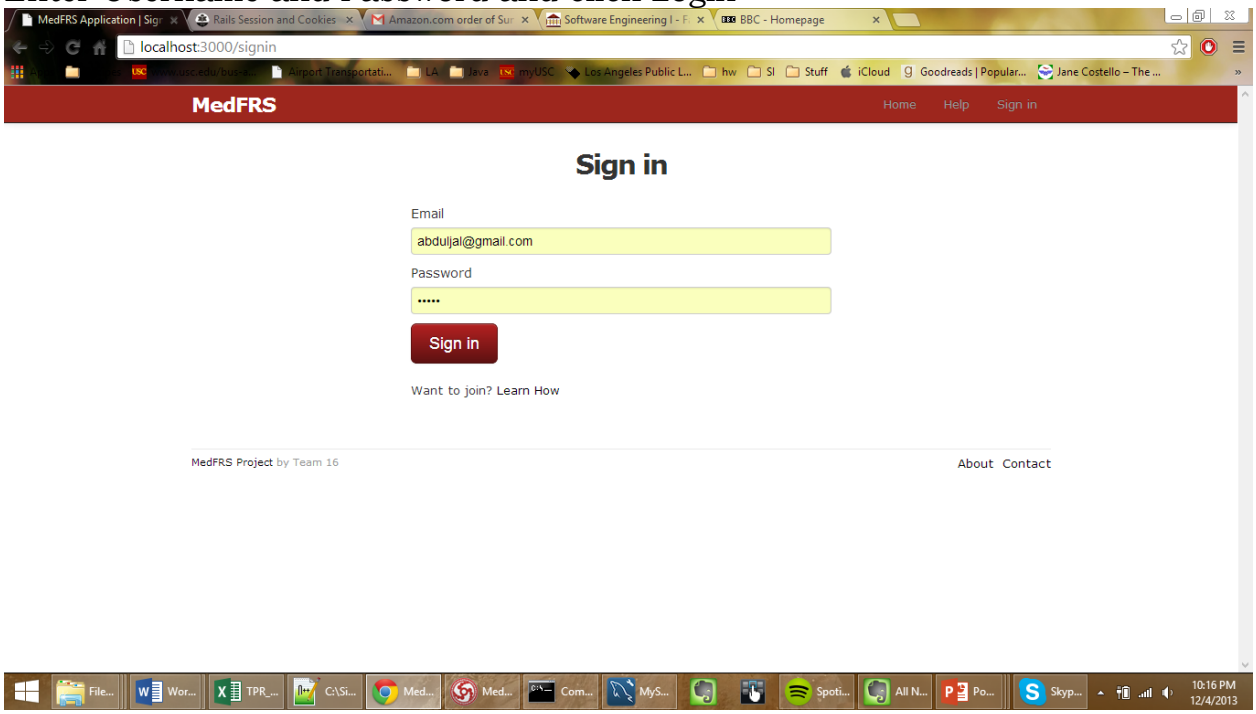

Figure 1 Sign In

Supervisor –

Maintenance Functions : Click Maintenance on Supervisor Homepage

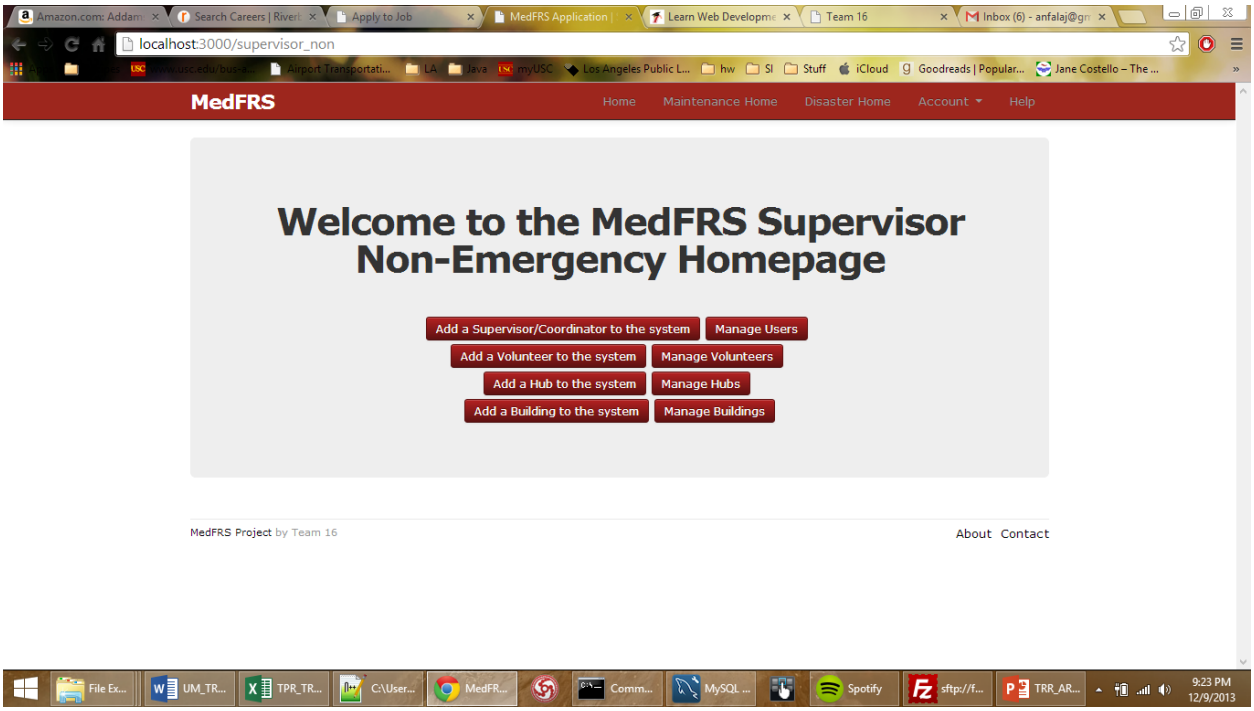

Figure 2 Maintenance Page

b. Add Supervisors/Transport Coordinators : Click Add Supervisors/Transport Coordinators
c. Add Volunteers : Click Add Volunteers
d. Add buildings : Click Add Buildings
e. Add hubs : Click Add Hubs
   -
   i. Enter the required information
   ii. Click enter
   iii. If successful, success message is shown else why failure occurred is shown
f. Manage all information : Click the corresponding Manage button
   i. Enter the updated information
   ii. Click enter
   iii. If successful, success message is shown else why failure occurred is shown.

Emergency Functions : Click Emergency on Supervisor Homepage and choose the disaster

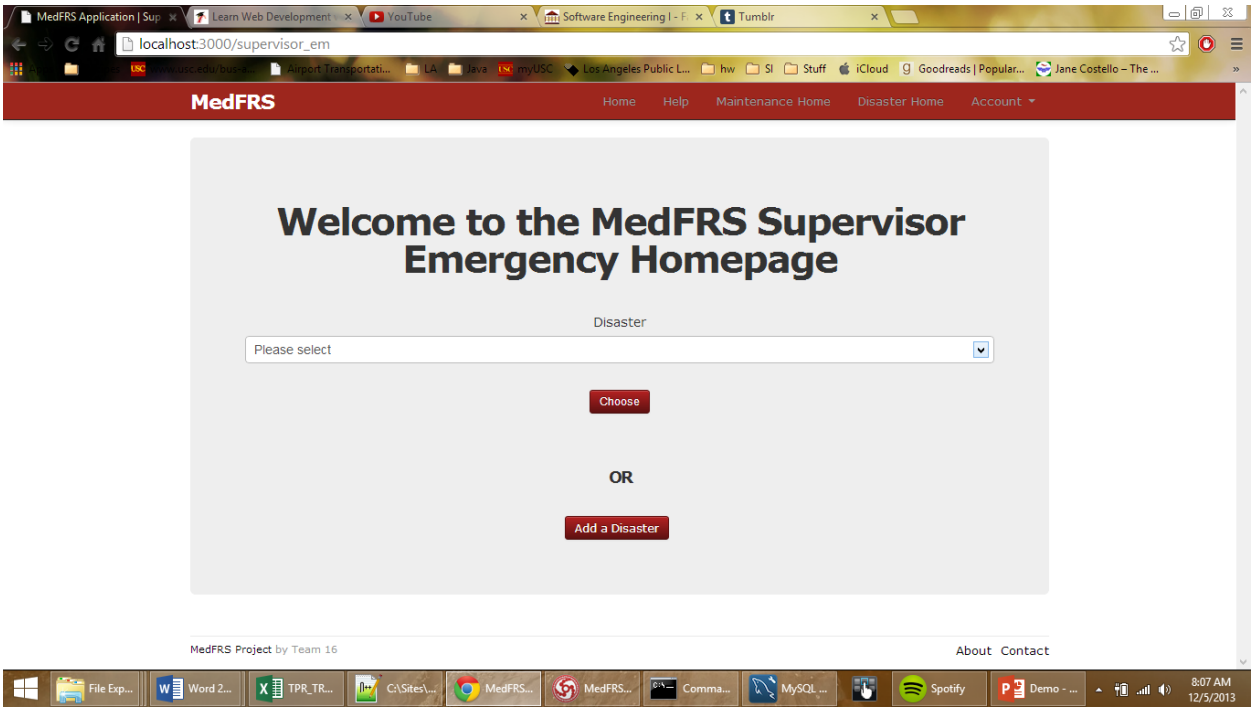

Figure 3 Initialize Disaster

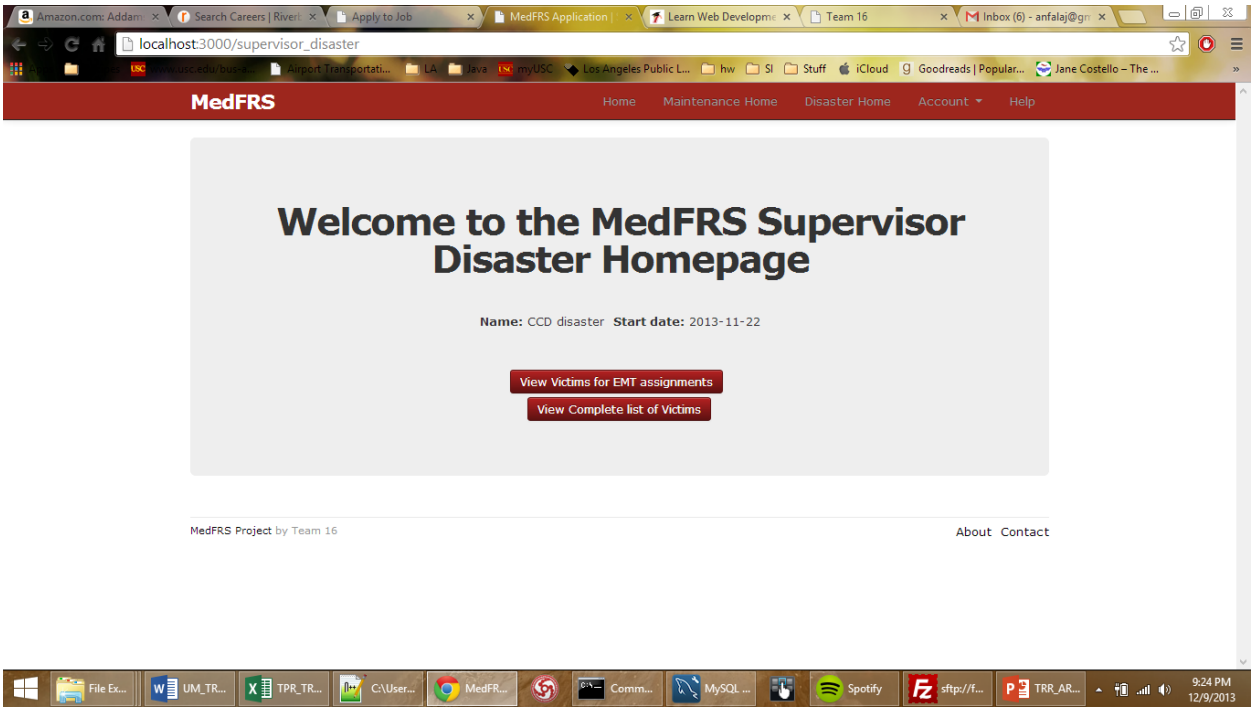

Figure 4 Disaster Homepage

g. Track victims and print a sublist of sorted victims for EMTs: click Track victims
   i. To sort click on the column to be sorted

ii. To get a sublist enter the narrowing criteria in the space provided

Transport Coordinator – Choose the disaster to get to TC Homepage

h. Enter Victim Transportation information :
   i. Click Enter Victim Transportation information
   ii. Enter the data in the fields of the empty row in the table and click enter.
   iii. If successful, success message is shown else why failure occurred is shown

Volunteer-

i. Data Collection
   i. Open the application
   ii. Enter the location details and comments in the comment section and press next

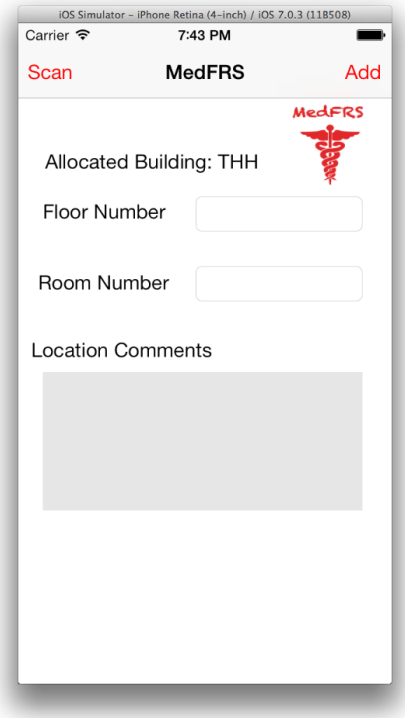

Figure 5 Location Details

iii. Enter Respiration details by clicking on the relevant options and press next

Figure 6 RPM Details

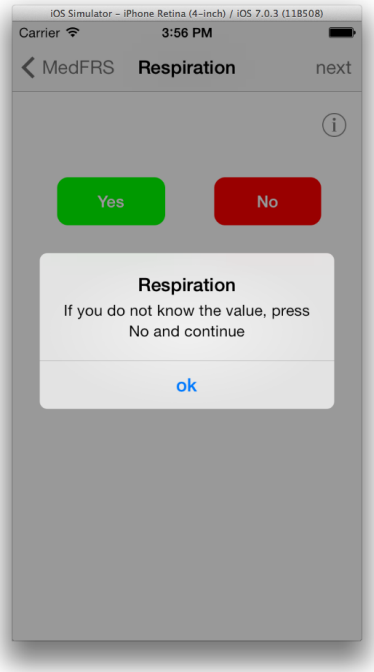

Figure 7 Help Message

iv. Enter Perfusion details by clicking on the relevant options and press next
v. Enter Mental status of the victim and press next
vi. Enter BP and Pulse of the Victim and press next

Figure 8 Vitals Page

vii. Scan the barcode using the barcode scanner or enter the barcode numbers manually

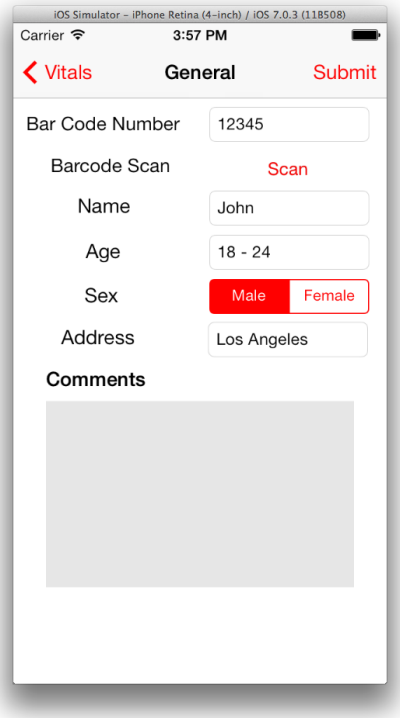

Figure 9 General Information

j. Auxiliary details such as Name, age, sex can be entered as needed
k. Once the above steps are completed on clicking next, the summary page is shown which will have all the options that have been selected previously. Any row can be modified.
l. Once the information is verified, press " Save" to save the data and upload it into the server.

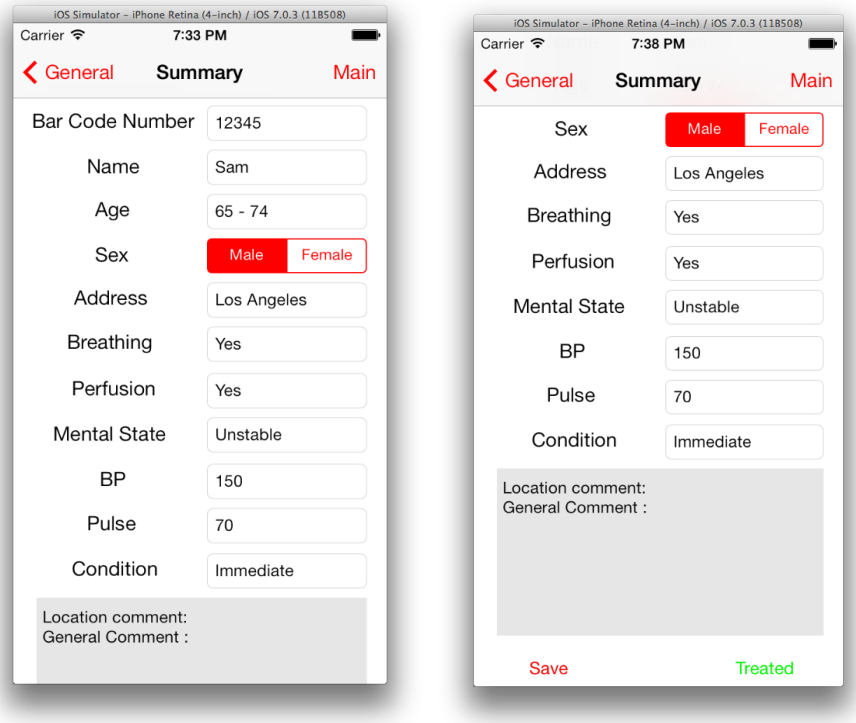

Figure 10 Summary Page

b) Scanning ID

1. Press “Scan” option present in the main screen

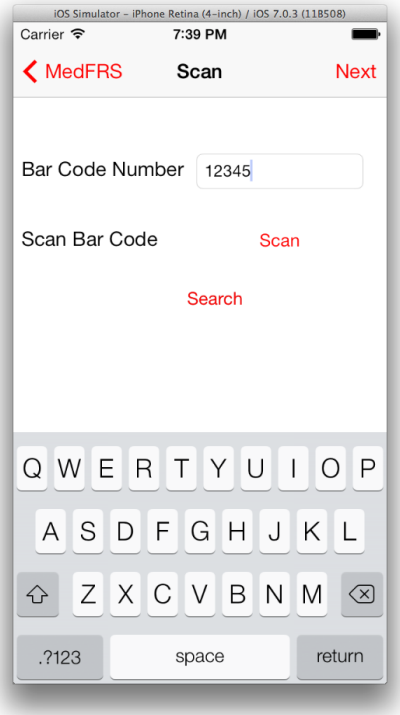

Figure 11 Barcode Search

2. Enter the barcode number or scan the bar code using the application
3. Press “Search”, If a record is present its details will be shown in the next screen
4. If EMT personal has treated the victim then “Treated” option can be clicked and “save” button can be pressed to update the record.

4. Troubleshooting

4.1 Frequently Asked questions

Supervisor –

1. How do I see a subsection of victims?
    a. Select the distinguishing features of victims you want to see in the search bar above the list of all victims
2. Is there a way for individuals to sign up online on their own?
    a. No, for security purposes all sign ups must be handled by an existing supervisor of the system.

Volunteer –

3. Which smartphone supports MedFRS application?
    a. Apple iPhone, iPad and iPod Touch having iOS 6 and above is supported
4. Should I register before downloading the Application?
    a. Yes, without registering OTP will not be generated and the application cannot be authenticated
5. Which value should I enter if I don't know to diagnose the patient?
    a. The value in "Red" is always preferred, if values are unknown
6. Will any information be stored in the smartphone?
    a. If records are successfully submitted, then no data is stored, else it will be stored until the records are submitted successfully
7. Should I enter all the fields in the application?
    a. Respiration, Perfusion and Mental Status details are mandatory, this is to establish the condition of the victim, all the other fields are optional

4.2 Error Codes and Messages

1. Invalid username/password: The username- password combination is not entered into our system. Either the information entered is not correct or the user has not been entered into the system and needs to go to a supervisor and sign up

2. Required fields are not entered: While inserting/ updating data all the required fields have not been filled. Populate them to continue.
3. Entries don't meet field format: While inserting/ updating data some fields have the wrong type of data. Populate them correctly to continue.
4. You are not authorized to access these pages: These pages are not viewable for your designation, if it's a faulty designation assignment, go to a supervisor to update your profile.
5. Authentication Unsuccessful: OTP authentication has failed
6. Unable to update record: This is when there is no network and the app has failed to upload the record to the server
7. Barcode Scan unsuccessful: This is when the barcode scanner fails to retrieve the barcode data successfully
8. Unable to get record: When the network is unable to retrieve the record from the server for the entered barcode

4.3 Note

OTP: One Time Pass
EMT: Emergency Response Team