

# Project Documentation

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## PhoneGap Mobile Application for Android/Windows/iOS

### Introduction

Mobile Application development of **Cottage Industry Cart App** to be used on cross-platform mobile environments with use of web-development tools and frameworks like HTML/CSS and jQueryMobile instead of native platform-specific languages using Adobe Phonegap Build. The aim of the application is for the catering of farm-grown items directly from NGOs ensuring quality product and delivery.

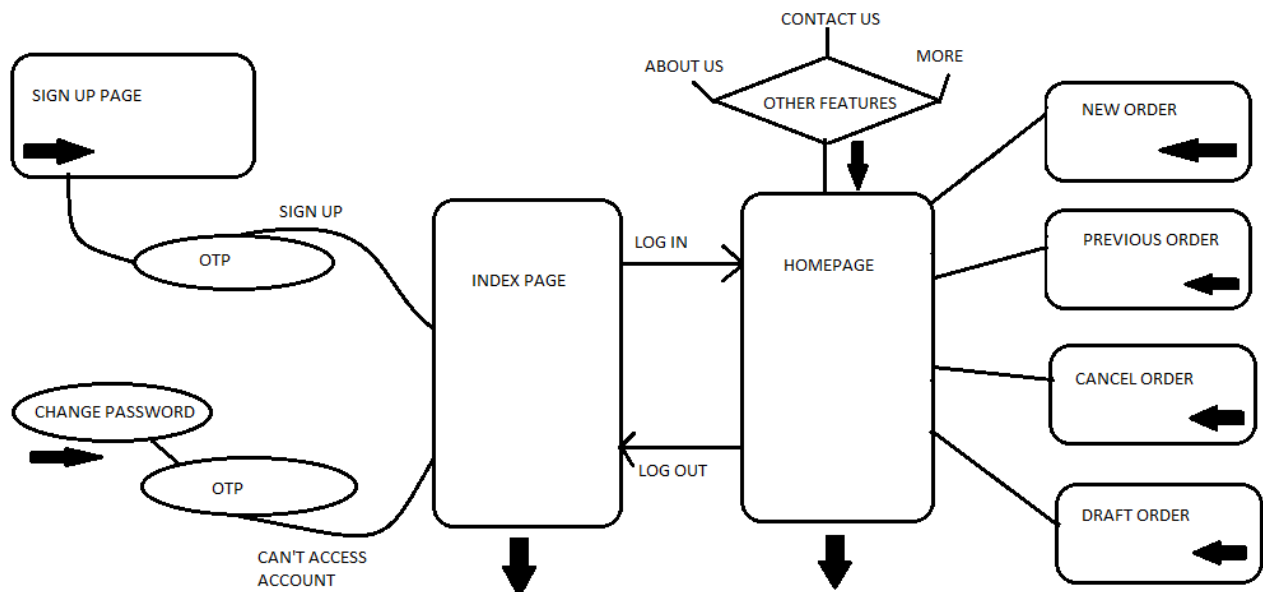
### Project Requirements

1. **Adobe Phonegap Build**- a free online Phonegap platform to convert submitted files to required platform application files - .ipa for iOS, .apk for Android and .xap for Windows. Adobe account is needed for sign-in.
2. **Wamp Server**- a windows web development environment to create web applications with Apache2, PHP, MySQL database.
3. A web browser respective to targeted platform - **Google Chrome** for Android application development and **Microsoft Edge** (Or IE 9 and above) for Windows phone application development.
4. **CORS plugin** for Google Chrome-Cross-origin resource sharing - a mechanism that allows JavaScript on a web page to make XMLHttpRequests to another domain, not the domain the JavaScript originated from (localhost).
5. **Eclipse/Notepad++** or any other Editor which supports HTML/CSS and JavaScript code.
6. **Google Playstore Account/Windows Developer Account** - for submitting apps on Google Playstore and Windows Store after certification.

## Web-Development Tools Used

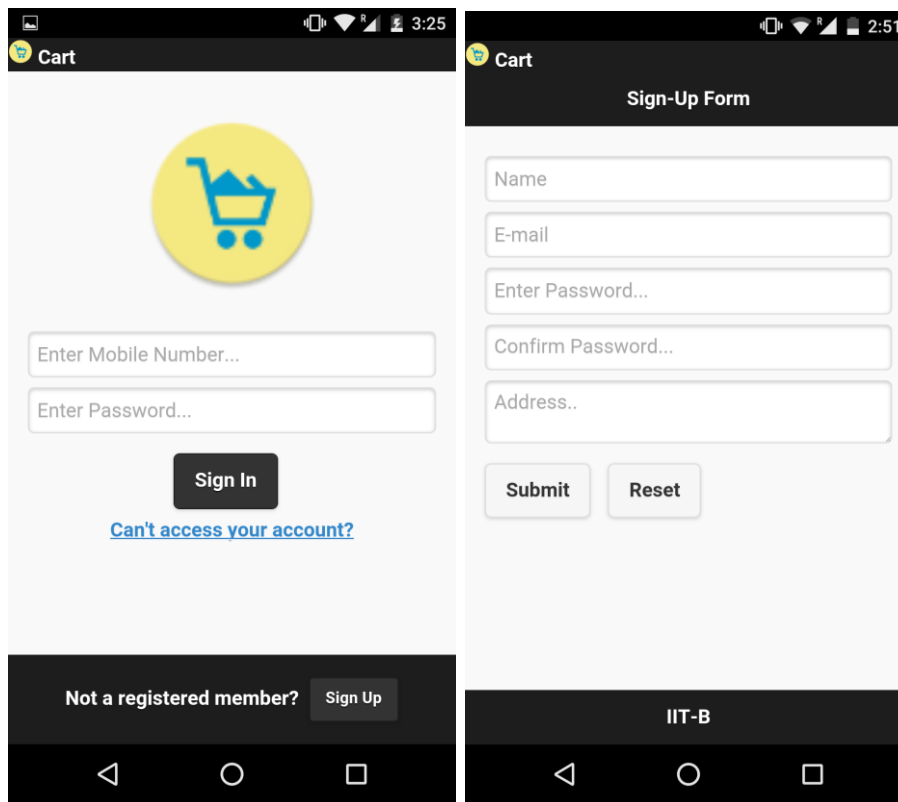
1. **jQuery Mobile framework** - consisting of HTML/CSS for rendering layout and base of the mobile application page to auto-fit to any device having any dimensions.
2. **Cordova APIs**- Cordova-specific methods and calls for deviceReady and other events handlers.
3. **Phonegap Plugins**- included in config.xml file in the main folder to map native functionalities to the phonegap application.
4. **JavaScript and AJAX** - for dynamically loading the variable contents of the mobile page which are retrieved/posted to Server-side and for implementation of functions and interconnections.
5. **JSON** - a JavaScript Object Notation used to deliver and receive server data in a compact manner through key-value pair format.
6. **XML** - used to store and transport data on the requested server URL by setting the required authentication headers.

## Control-Flow Diagram



The control of the application changes as shown in the above diagram. The dark arrow signs show the flow when hard-back button of the device is pressed. Flow changes as:

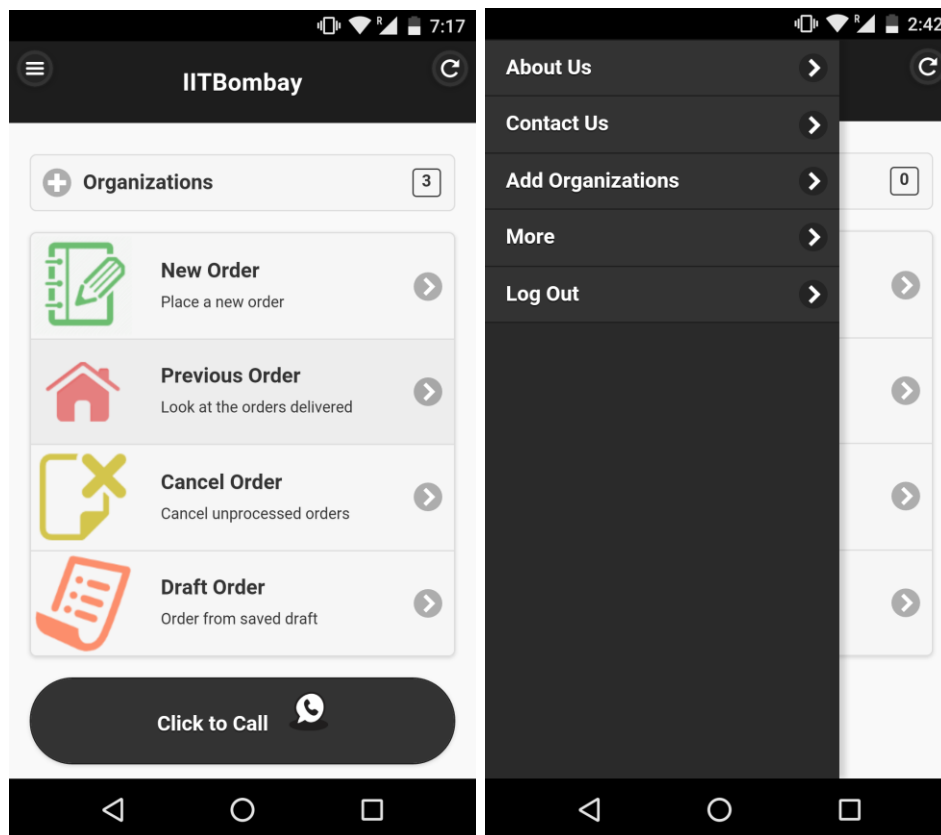
- A. The index page is the base of the control flow where the application initializes to and can then be passed on depending upon the option selected. Back button closes the entire application.



- a. If Sign-Up is selected then the control goes to a Pop-up which validates the One-time-password(OTP) sent to email id and after cross-checking with the server, control goes to the Sign Up Form page. Entries are then saved and user is registered on the Application.
- b. In case Forgot Password Link is selected the control passes to another Pop-up which validates the OTP sent to user via email and then after cross-checking with the server lets the user to change password.
- c. If user needs to Sign-In into the application, a registered mobile number and respective password is to be entered and after verifying control goes to the homepage of the application.

- B. Once user logs in, the homepage contains : Header with name of current organization, a side panel with features like- about us, contact us, help, etc. and an option to add organizations to the app, and log out which takes user back to index page. Refresh button on right-corner of header reloads the application checking for change in status of organization requests (rejected, accepted, pending). Body of the page contains a collapsible bar with count and a list of organizations which have approved the user. The user can select the required organization.

The footer contains a 'Click to call' button to make a call to the select organization. Back button closes entire application.



Other Homepage features are:

- a. New Order : This page displays a collapsible-set of different categories of products from which users can order. On selecting a particular category, a drop down list appears with entry field for entering quantity to be ordered, and cost is automatically calculated and shown on the

side. After input is given, user can either choose to Draft the order or to Proceed to checkout or go back and modify the order.

Choose your Order Items

+ Grocery ( Kg )

- Indian Vegetables(Kg)

alfalfa	0.0	0₹
arrowroot	0.0	0₹
Baby Corn	0.0	0₹
Beans2	0.0	0₹
Beet2	0.0	0₹

☰ Draft   Proceed →

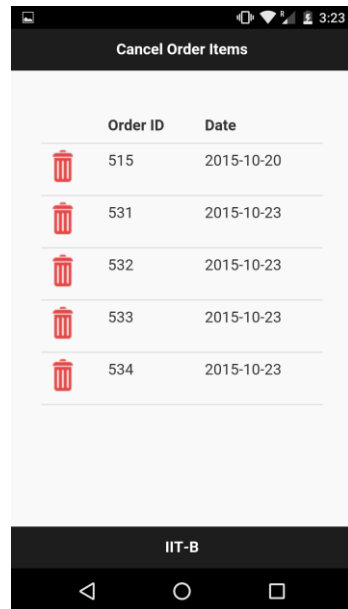
- b. Previous Order: Contains a list of previously ordered items and shows the selected order on a popup. If user wants to reorder same items or change their quantity, they select modify and after input of quantity is given, can reorder the same.

Previous Order Items

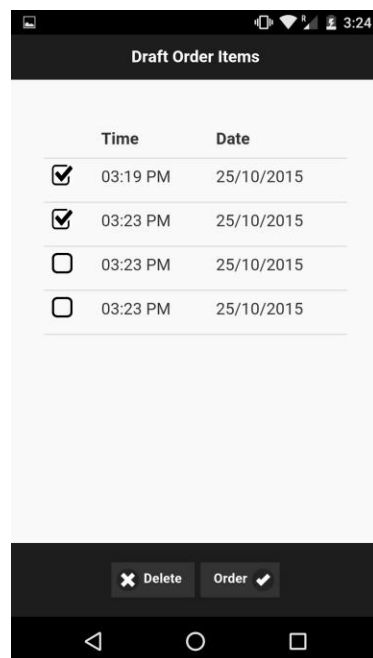
Order ID	Date
515	2015-10-20
531	2015-10-23
532	2015-10-23
533	2015-10-23
534	2015-10-23

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- c. Cancel Order: Contains a list of previously ordered items and shows the selected order on a popup. A side delete button cancels the order on clicking.



- d. Draft Order: Contains all the drafts of a user for the selected organization since he/she has first logged in through the device. The checkboxes are used to select multiple drafts. There is option to delete them, or to combine them and place an order.



## Code

<https://snehalshirgure@bitbucket.org/snehalshirgure/cartapp.git>

## Contact Details

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