

Technical Design Document for Mobile App DDT | **2020**

Version 1.0

Prepared for

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• **1. INTRODUCTION**

1.1 Overview

Client. wants to develop a new Mobile App (DDT); that will help reduce the manual activities of its Field Sales Executives to a significant extent. *Clients* products are kept by many dealers for sale, and they need to place orders as and when required. Field Sales Executives are deployed by the company to cover all the geographical locations, and facilitate the dealers in placing new orders efficiently. This app will be installed at Android phones of all the FSEs. Once they sign in the app with appropriate rights, they can see the relevant functionalities that they can utilize to manage their various daily tasks. This Mobile App will help all its FSEs to work efficiently, and avoid collecting and submitting data manually to a large extent.

The Mobile App DDT needs to be as per the scope discussed and agreed by both, the *Clients Concepts Pvt. Ltd. & Dishnet Wireless Ltd.* Following technical proposal has been created for the design & development of this Mobile App.

1.2 Project Scope

The broad scope of the project is as follows:

- a) Once the user i.e. the Field Sales Executive will sign in the App, he will see the following icons: ATTENDANCE, DAILY REPORTING, DISTRIBUTOR STOCK, DAILY EXPENSES, PAYMENT COLLECTION, PRIMARY SALE, MONTHLY TOUR PLAN, REPORTS, CHECK OUT, COMPLAINT/FEEDBACK ABOUT, UPDATE AN APP, & VERSION UPDATE.
- b) **ATTENDANCE** – This will be the first enabled icon that the user must use and log his attendance. Only after successful entry of the user's attendance, other icons on the home page will get enabled. If the user chooses the working status as "LEAVE", he will be provided make two entries such as, FROM & TO dates & Type of Leave from a drop down list.
- c) **DAILY REPORTING** – Through this icon, an FSE will be able to see every morning, the list of dealers assigned to him for either Order booking OR Meeting for Project, Architecture, Distributor or Others. He needs to plan his day out accordingly, and visit as per the assigned tasks.
- d) **DISTRIBUTOR STOCK** – Will display Distributor-wise List of Product Name, Qty & MRP.

- e) **DAILY EXPENSES** – User will use this icon to enter his daily expenses related data. He will be provided a text field to enter the Bill number and Bill amount manually. Along with Bill number, he will also be provided with option to click images of the bill. A maximum of five bill images per day will be allowed. Also, the total bill amount will be made visible at the end of the form, before the SUBMIT button.
- f) **PAYMENT COLLECTION** – User can use this icon to enter the details of the payment collection. Three options are provided, viz. Cash, Cheque & RTGS.
- g) **PRIMARY SALE** – Will display sale data per distributor between any two given dates. Fields to be displayed will be Product Name, Qty & MRP. Total sale amount will also be made available.
- h) **MONTHLY TOUR PLAN** – In this functionality, user will enter FROM and TO dates, travelling mode from the drop down, working status from the drop down, Distributor name from the drop down, etc. Then, user can preview the plan, before submitting for approval.
- i) **REPORTS** – FSE can view his Attendance report for a particular date. Other than this, here are few more reports that can be generated, such as, Daily Sales Report, MTP Report, Distributor Stock Report, Retailer Information, Retailer wise Sale Report.
- j) **CHECK OUT** – Once the FSE has finished visiting all the allocated dealers assigned to him for a particular day, he can check out by using this option. That will be the logical end of his daily work.
- k) **COMPLAINT/FEEDBACK ABOUT** – User can use this functionality to select any distributor from drop down, select the type of feedback, and enter his remarks.
- l) **UPDATE AN APP** – To allow new user to shift the app in working condition.
- m) **VERSION UPDATE** – to make the app using current version of the product.
- n) One day training to FSEs of *Clients Concepts Pvt. Ltd.*

• **2. PROJECT REQUIREMENTS**

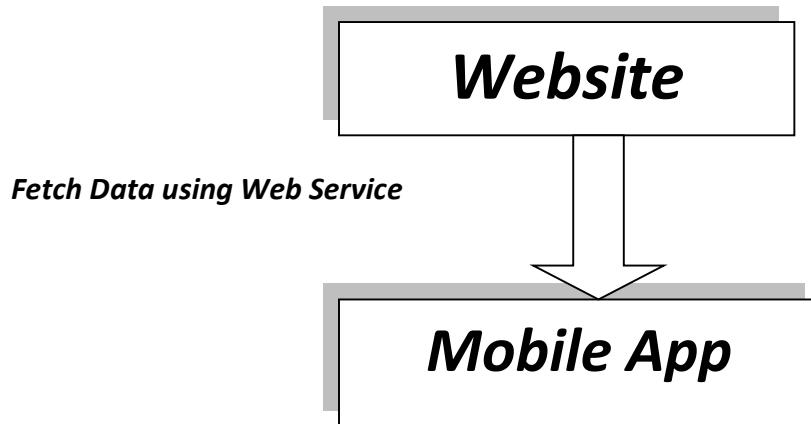
Mobile App Development:

CLIENTS CONCEPTS PVT. LTD. wants to customize *Dishnet Wireless* proprietary Mobile App DDT for its Sales Reps, that will automate the work of its Field Sales Executives who go out to the dealer locations for Order booking or Meetings. The Mobile App needs to have a Fresh, Eye-catching & Attractive UI (Look and Feel), and should cover the required functionalities.

The Mobile App needs to be developed first on Android platform. Apart from the Mobile App, the same functionalities will also be available thru web.

• **3. PROPOSED SOLUTION**

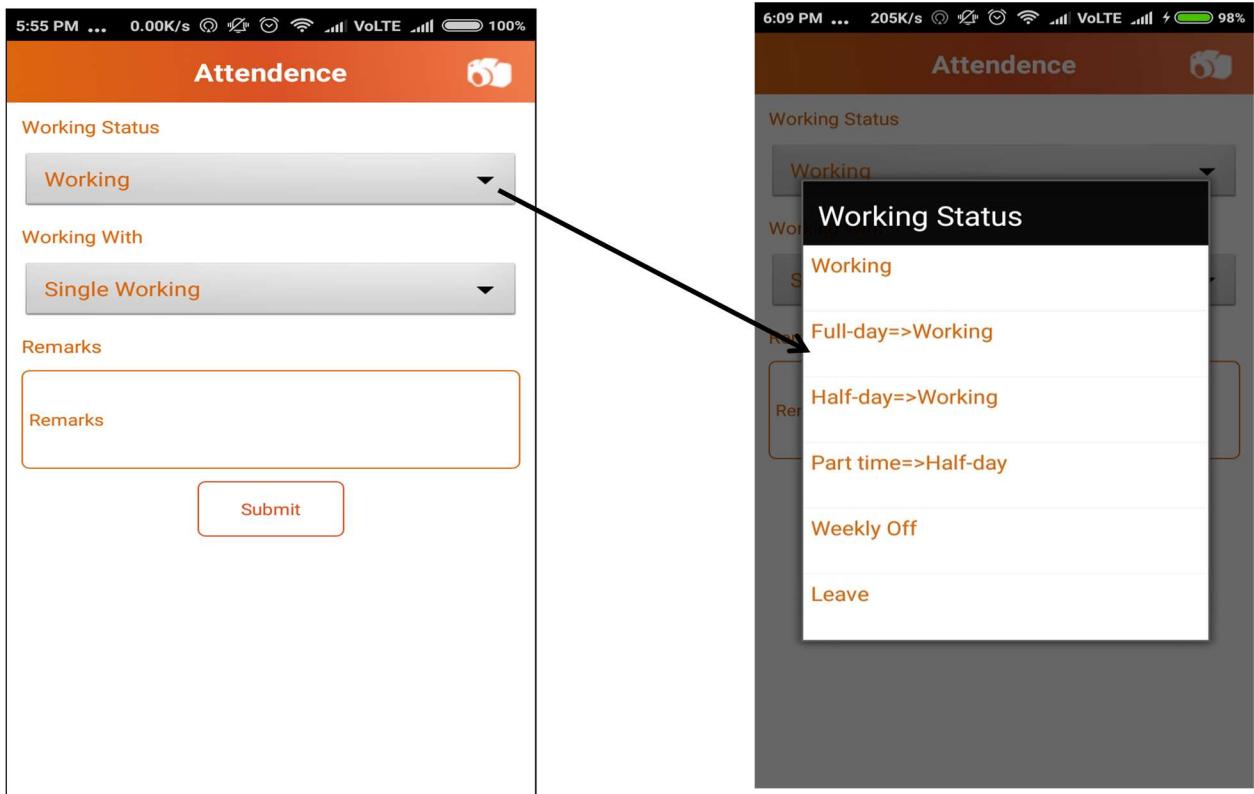
3.1. Overall Mobile App Structure



3.1.1 Mobile App Architecture



ATTENDANCE



On Selection of “Working Status” as *Leave*, user will be provided the following fields to be entered:

1. FROM DATE
2. TO DATE
3. Type of leave (Drop-down)

DAILY REPORTING

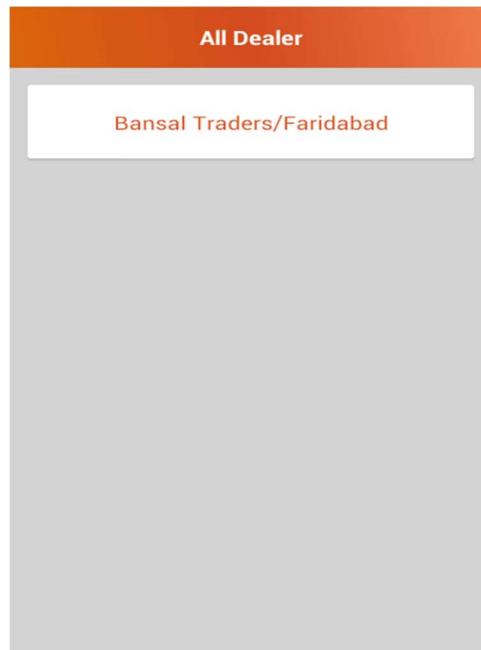


SAMPLE

Product Name	● Product 1
QTY	12
MRP	475

ADD MORE **SUBMIT**

This form allows users to enter details for a sample product. It includes fields for Product Name (set to 'Product 1'), QTY (set to '12'), and MRP (set to '475'). There are 'ADD MORE' and 'SUBMIT' buttons at the bottom.



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The image displays three screenshots of a mobile application interface:

- All Beat's**: A list of locations under the heading "All Beat's". The items listed are SEC.22,23/, SEC-21-46/, GANDHI COLONY/, NIT-3/, NIT-5/, and 33 FT.ROAD/.
- All Retailer**: A list of retailer names under the heading "All Retailer". The items listed are filter retailer, qwerty[qwertyui], deep retailer[tset manacle], Bhoop[bhoop], manojo[manoj], and a[a]. Below this is a "Create Retailer" button.
- All Retailer** (with modal open): Similar to the second screenshot, but with an "Information" modal open. The modal shows two radio buttons: "Contacted" and "Not Contacted".
- Product Details**: A detailed view of product information. At the top, there are buttons for "Productive" (selected) and "Non Productive". Below are buttons for "Previous" and "Preview". The main section is titled "Product 1" and lists various product variants with their quantities and prices:

ALL IN ONE 1 Kg.	2	400.00
ALL IN ONE 150 Gm	5	200.00
ALL IN ONE 350 Gm	8	680.00
ALL IN ONE 40 Gm	5	50.00
ALL IN ONE 150 Gm	6	210.00
ALL IN ONE 20 Gm	Qty	
ALL IN ONE 350 Gm	Qty	
ALL IN ONE 40 Gm	Qty	

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Product Name	Qty	Value	
All In One 40Gm (8.00...)	2	15.00	
All In One 55 gm (8....)	5	37.50	
All In One 50 gm (7.5...	8	60.00	
All In One 40 Gm (9.6...	5	37.50	
All In One 45GM(10.8...	6	45.00	

Product Name	Qty	Value	
Banana Wafers(BlackP...	5	35.00	

Do you want to Edit ?

All In One 40Gm (8.00...)	
8	56
Yes	No

Total Value **195.00**

Add More		Book Order
----------	--	------------



Product Name	Qty	Value	
All In One 40Gm (8.00...)	2	15.00	
All In One 55 gm (8....)	5	37.50	
All In One 50 gm (7.5...	8	60.00	
All In One 40 Gm (9.6...	5	37.50	
All In One 45GM(10.8...	6	45.00	

Product Name	Qty	Value	
All In One 40Gm (8.00...)	2	15.00	
All In One 55 gm (8....)	5	37.50	
All In One 50 gm (7.5...	8	60.00	
All In One 40 Gm (9.6...	5	37.50	
All In One 45GM(10.8...	6	45.00	

Add Remarks

<input type="text"/>
<input type="button" value="Exit"/> <input type="button" value="Submit"/>

Total Value **195.00**

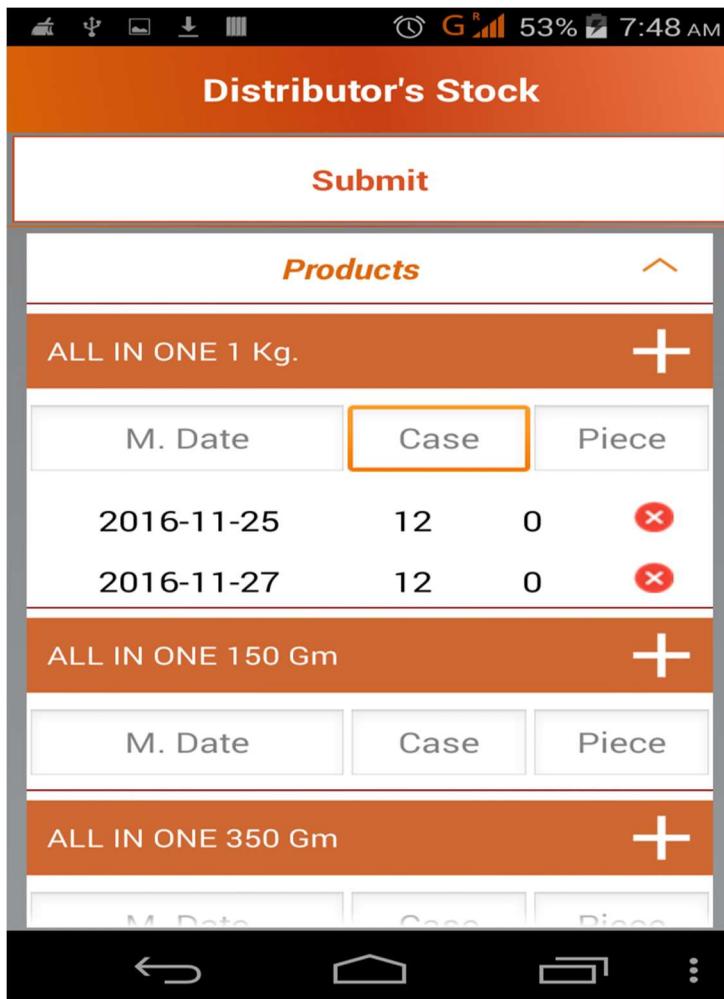
Add More		Book Order
----------	--	------------

Total Value **312.25**

Add More		Book Order
----------	--	------------



DISTRIBUTOR STOCK



DAILY EXPENSES

The image displays two side-by-side screenshots of a mobile application interface for "Daily Expenses".

Left Screenshot:

- Travelling Mode:** A dropdown menu showing "Motorcycle".
- Town Visited:** An input field containing "search visited location" with a magnifying glass icon.
- Hotel Rent:** An empty input field.
- Start Journey:** An empty input field.
- End Journey:** An empty input field.
- Total Kilometer:** An empty input field.

Right Screenshot:

- Telecom:** An empty input field.
- Miscellaneous:** An empty input field.
- Total:** A section containing three large black rectangular boxes labeled "pls click image here".
- Submit:** A button at the bottom right.

Both screenshots show a top status bar with signal strength, battery level (6%), and time (6:05 PM). The bottom navigation bar includes icons for back, home, recent apps, and more.

PAYMENT COLLECTION

The image displays two side-by-side screenshots of a mobile application interface titled "Payment Collection".

Left Screenshot: Shows the initial state of the form. It includes a dropdown menu labeled "Distributor/Town" containing the value "A K S Enterprises/Jogeshwari To". Below it is a section titled "Payment Mode" with three radio button options: "By Cash", "By Cheque", and "By RTGS". A large orange "Submit" button is centered at the bottom.

Right Screenshot: Shows the state after a selection has been made. The "By Cash" radio button is now selected, indicated by a green dot. The other two options, "By Cheque" and "By RTGS", are unselected. A new input field labeled "Amount" is visible above the "Submit" button. The "Submit" button remains at the bottom.

5:10 PM ... 0.45K/s VoL.. 100%

5:10 PM ... 0.25K/s VoL.. 100%

Payment Collection

A K S Enterprises/Jogeshwari To

Payment Mode

By Cash

By Cheque

By RTGS

Amount

Bank Branch

Cheque No.

Cheque Date

Submit

Payment Collection

A K S Enterprises/Jogeshwari To

Payment Mode

By Cash

By Cheque

By RTGS

Amount

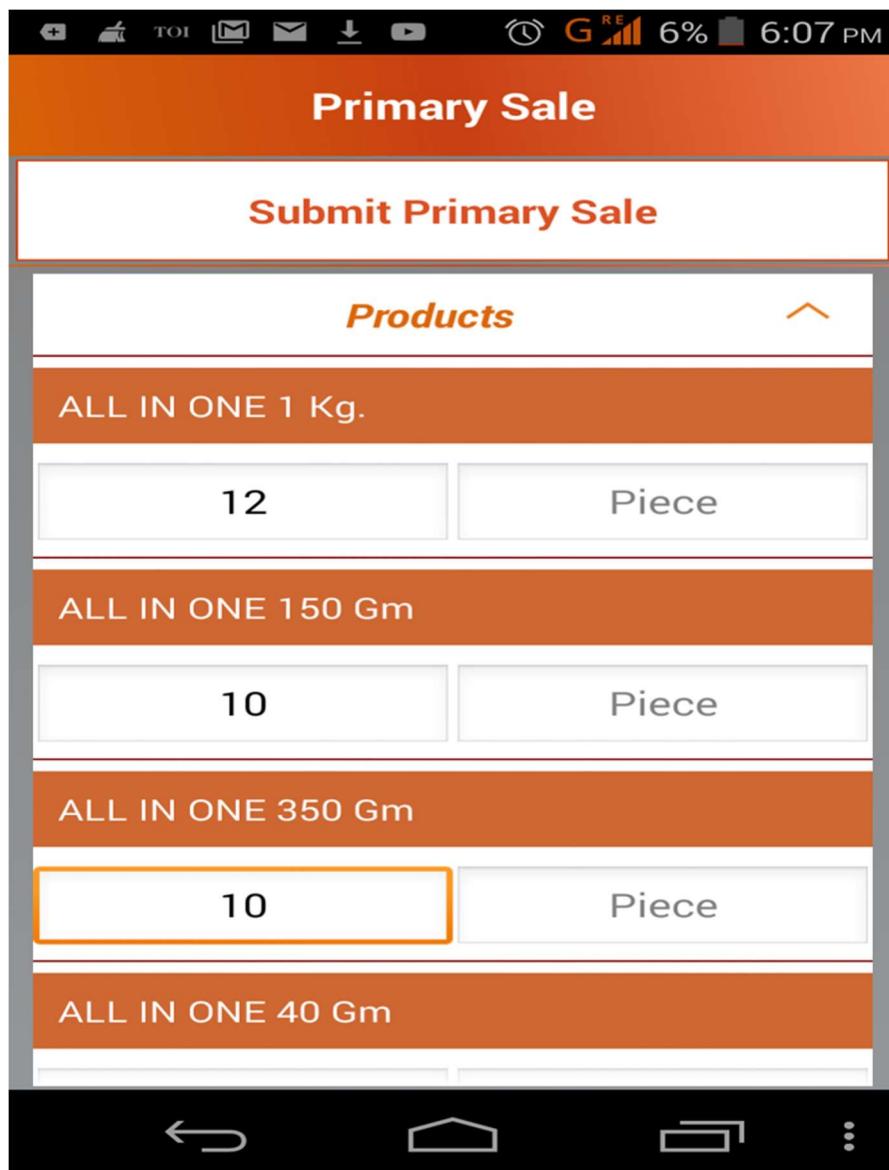
Bank Branch

Transaction No.

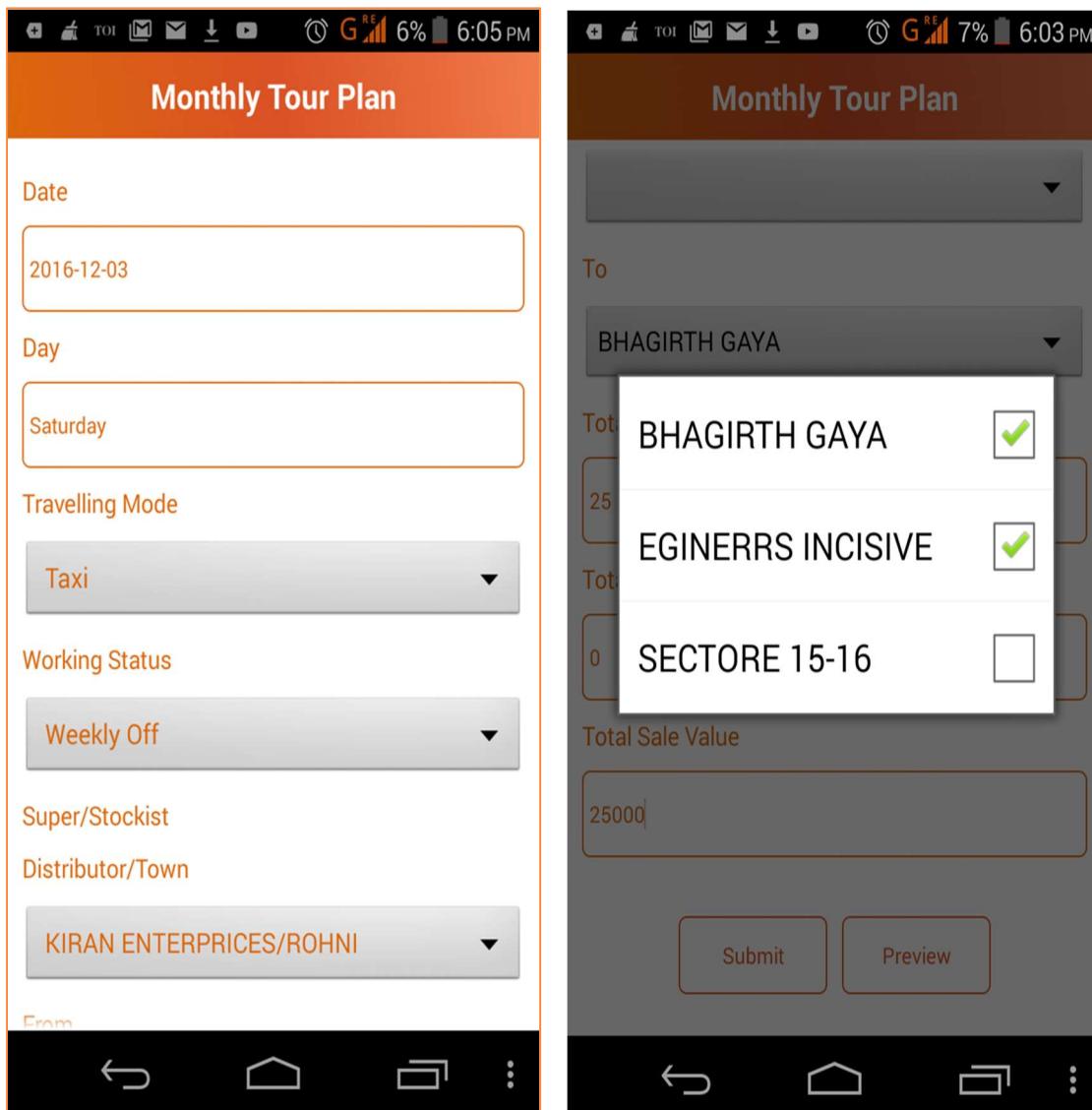
Transaction Date

Submit

PRIMARY SALE

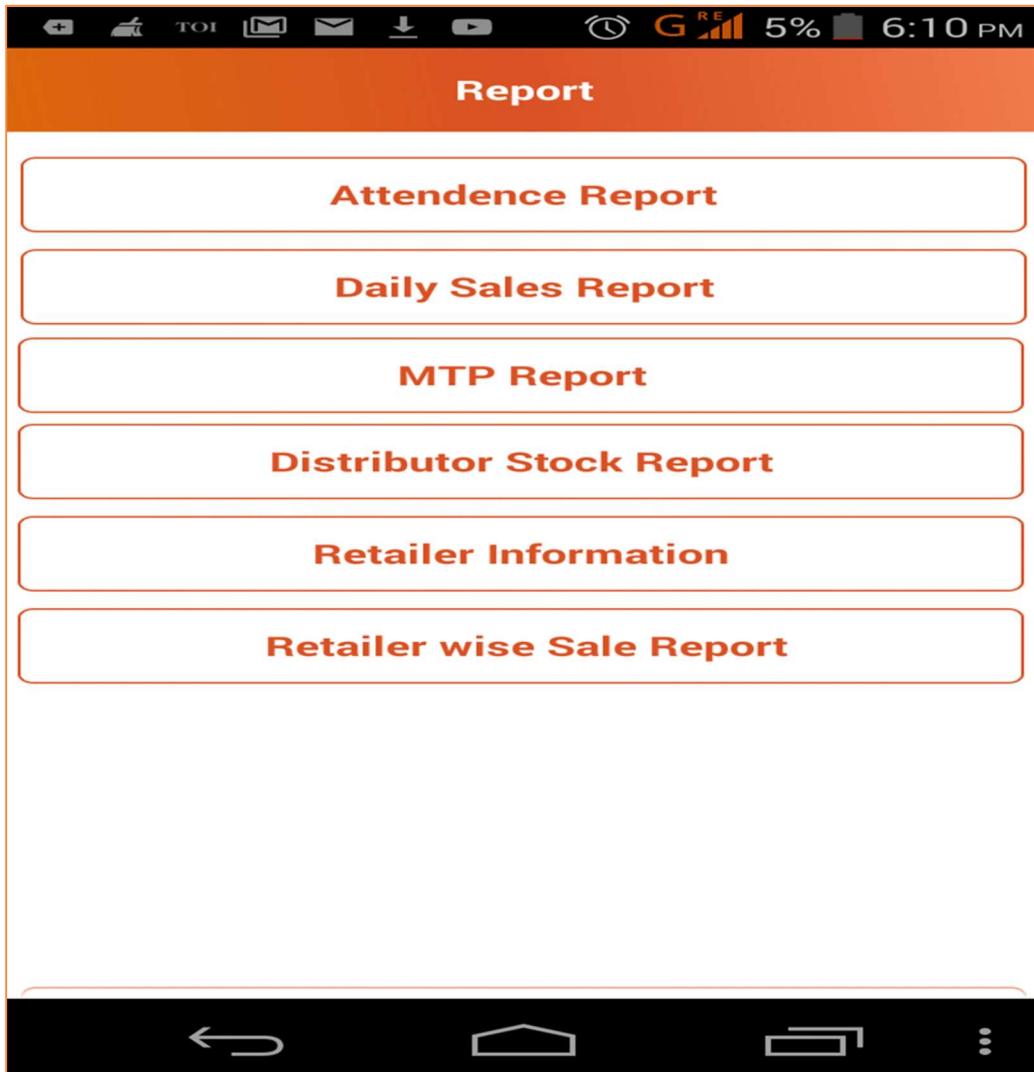


MONTHLY TOUR PLAN

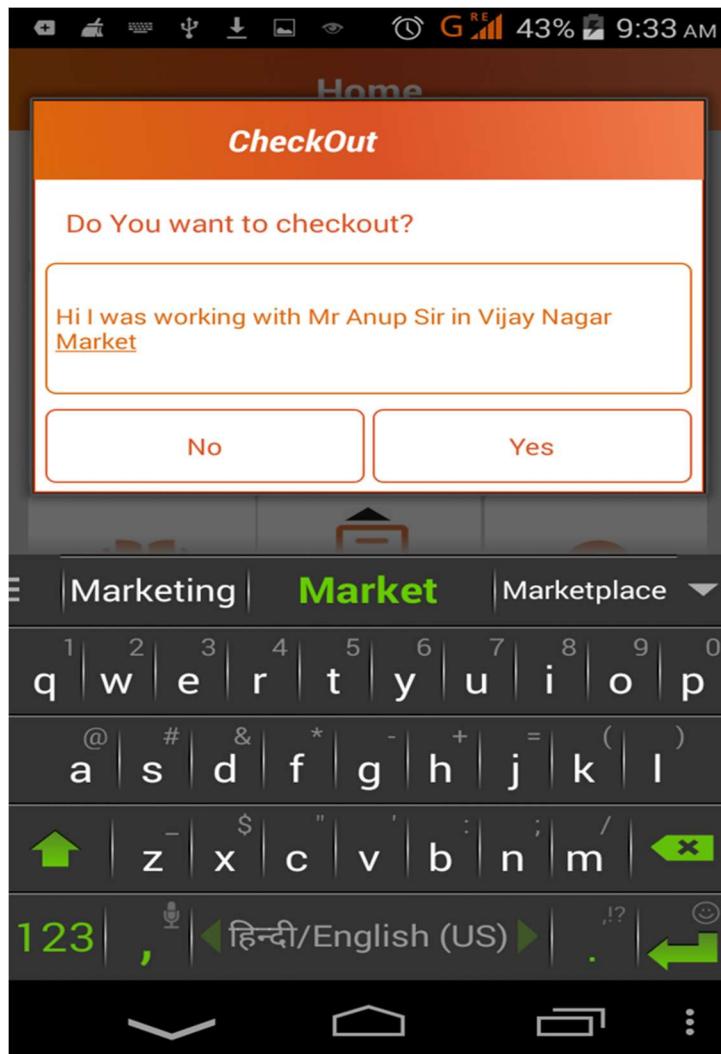


Date	Distributor/ Town	From Beat	Total Outlets	To Beat
2016-12-02	Test Dealer/ EAST NEW DELHI	BHAGIRTH GAYA	0	BHAGIRTH GAYA, EGINERS S INCISIVE
2016-12-03	Test Dealer/ EAST NEW DELHI	BHAGIRTH GAYA	40	SECTORE 15-16

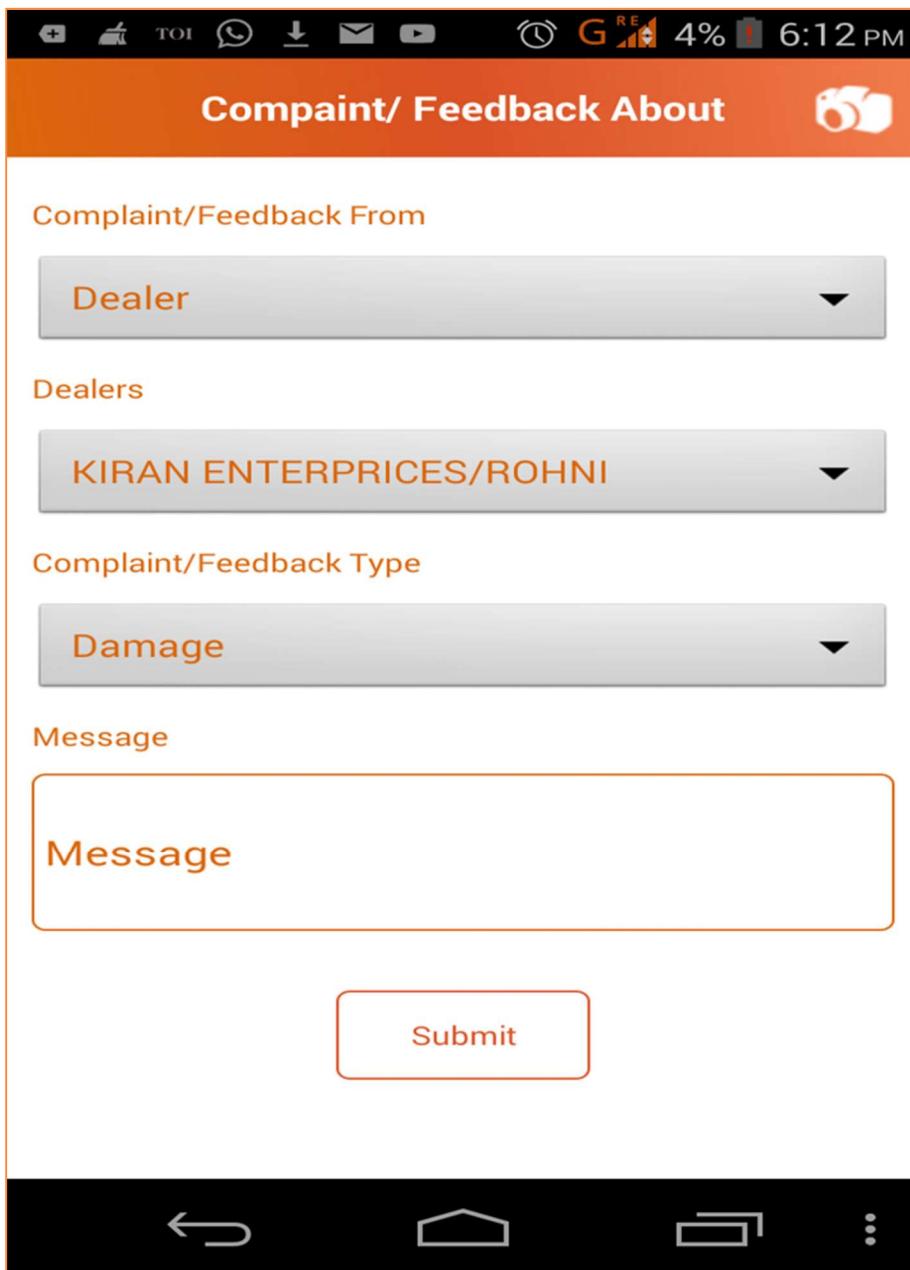
REPORTS



CHECK OUT



COMPLAINT/FEEDBACK ABOUT



3.2. Functionality Covered in Mobile App

General approach

The DDT Mobile App will be developed on Android platform. We propose the content to be organized & presented in the following manner.

- It is advised to restructure content on the mobile app under appropriate Headings / Titles. We have mentioned the headings here also as per our understanding, however, it is understood that there may be some additions/deletions subsequently.
- Web services would be developed to fetch data from the Website.
- There are 12 icons on the home page, that the user lands after signing into the app. Once user taps on an icon, he is presented with further sub-headings for him to browse, and navigate.
- Developing Web services for the DDT app, to fetch the data from the server, would be responsibility of *Dishnet Wireless*.
- *Clients Concepts Pvt. Ltd.* needs to share the data needed to be accessed & shown on the mobile app.
- Mobile App will also be made available off line.\
- Reminder notification on one day before of any followup meetings. Without reading can't be deleted.
- Reminder notification on one day before of any Date of Birth/Marriage Anniversary for advance wishing purpose. Without reading can't be deleted.
- User Daily rout tracking Through GPS location monitoring system.

Mobile App Navigation:

- a) Mobile App's navigation scheme and features should allow users to find and access information effectively and efficiently.
- b) The navigation elements should be clearly differentiated from each other and should be placed in a consistent way so that it can be easily located on each page.

ATTENDANCE

Field Sales Executive will use this functionality to enter his daily attendance.

DAILY REPORTING:

Through this icon, a Field Sales Executive will be able to see every morning, the list of dealers assigned to him for either Order booking (Sample drop or Order collection) OR Meeting for Project, Architecture, Distributor or Others. He needs to plan his day out accordingly, and visit those dealers for the assigned task.

There will be a drop down field thru which, he will select a dealer. Following selection of a dealer, he will need to select a City, where he will visit a Location and perform the assigned task. Depending on his selection, he will visit the dealer, and record his day's achievements, and report it. He will enter his remarks, and can take pictures, before submitting the details against that dealer. Thereafter, he will move on to attend the next dealer/location.

DISTRIBUTOR STOCK

Will display Distributor-wise List of Product Name, Qty & MRP.

DAILY EXPENSES

User will use this icon to enter his daily expenses related data. He will be provided a text field to enter the Bill number and Bill amount manually. Along with Bill number, he will also be provided with option to click images of the bill. A maximum of five bill images per day will be allowed. Also, the total bill amount will be made visible at the end of the form, before the SUBMIT button.

PAYMENT COLLECTION

User can use this icon to enter the details of the payment collection. Three options are provided, viz. Cash, Cheque & RTGS.

PRIMARY SALE

This functionality will display sale data per distributor between any two given dates. Fields to be displayed will be Product Name, Qty & MRP. Total sale amount will also be made available.

MONTHLY TOUR PLAN

Through this icon, user will enter FROM and TO dates, travelling mode from the drop down, working status from the drop down, Distributor name from the drop down, etc. Then, user can preview the plan, before submitting for approval.

REPORTS:

FSE can view his Attendance report for a particular date. Other than this, here are few more reports that can be generated, such as, Daily Sales Report, MTP Report, Distributor Stock Report, Retailer Information, Retailer wise Sale Report..

CHECK OUT

Field Sales Executive will use this functionality once he has completed his day's assignments, and is ready to report his day's out time.

COMPLAINT/FEEDBACK ABOUT

User can use this functionality to select any distributor from drop down, select the type of feedback, and enter his remarks.

UPDATE AN APP

To allow a new user to update the data on the app like if any route or Distributor has been shifted for any User, after pressing the button update an app, data will be updated.

VERSION UPDATE

To make the app using current version of the product from the playstore.

3.3. Technology Used

- The Mobile AppDDT would be developed on Android.
- The App will be uploaded to Google play store.

3.4. Assumption & Dependencies, Constraints & Risks

- The Mobile App would be launched after the UAT acceptance from *Clients Testing Machines Pvt., Ltd.*
- The Developer would provide One Year offsite maintenance for Mobile App which would essentially mean rectification of errors. For addition of new functionality / pages separate proposal would be submitted after understanding the requirement.
- Requirement from client to be frozen before the start of the development.
- In case, there is any change to the scope of work requested at a later stage, it will be treated as an enhancement and will be treated as Change Request and will be an asset to estimation and effort analysis.
- Frequent changes of functionality must be avoided, as it may lead to unexpected behavior of application.
- Version releasing features must be well defined. It is recommended to enhance and cover post-release feature in next release.
- Delay in content delivery from *Clients Concepts Pvt. Ltd.* will affect the schedule of project development and deployment, and that will impact resources of *Dishnet Wireless* as well.
- No functional and UI changes will be considered, once the development has been started. In case it is very important for the app and *Clients Concepts Pvt. Ltd.* wants it be considered, then such changes will be considered only via CCB (Change Control Board).
- *Dishnet Wireless* will require to sync CRM data of *Clients Concepts Pvt. Ltd.* with that of itself.
- We will require full infrastructure support from *Clients Concepts Pvt. Ltd.*, in case of deployment and production execution of the deliverables.

- We need timely access to the content for the app, in all the required formats such as, text, multimedia, attachments, and web formats.
- *Clients Concepts Pvt. Ltd.* to agree to allow development team of *Dishnet Wireless* to interact with its own technical team for seeking technical inputs as and when needed.

3.5. Implementation Approach

- On receipt of work order the Developer would prepare a Technical Design Document for the Mobile App. The same will be submitted to *Clients Concepts Pvt. Ltd.* coordinator for approval. All changes / suggestions would be done by the Developer (keeping in mind the proposed features). Further work would only be started after *Clients Concepts Pvt. Ltd.* Sends an email with its approval for Developer to begin with the construction phase.
- On completion of the functionality as detailed in the Technical Design Doc, the *Clients Concepts Pvt. Ltd.* coordinator / User department shall issue the Acceptance of Mobile App functionality that was there in the proposal.
- The Mobile App would be subsequently launched in the play store.
- The Developer would provide One year offsite maintenance support after completion of the Mobile App which would essentially mean only rectification of errors. For addition of new functionality / pages separate proposal would be submitted after understanding the requirement.

4. PROJECT MONITORING

All communication for the project would be done through emails.

4.1. Project Monitoring Committee

A project monitoring committee can be formed containing one member each from *Clients Concepts Pvt. Ltd.* and *Dishnet Wireless*, which will send review of the project on weekly basis.

4.2. Project Schedule

Phase I (5 Weeks): Mobile App Development

S.N.	Activity	Duration	Cumulative duration	Responsibility
1	Home Page Design	1 Week	1 Week	<i>Dishnet Wireless</i>
2	Mobile UI Approval	1 Week	2 Weeks	<i>Clients</i>
3	Mobile App Architecture &Functionality Development	2 Weeks	4 Weeks	<i>Dishnet Wireless</i>
4	Approval of Functionality	1 Weeks	5 Weeks	<i>Clients</i>

Note: Project start day is when work order is received from Clients Testing.

5. Acceptance Criteria

- Web service should be able to fetch and display the necessary content of the Website, under appropriate heads/links on the mobile screen and display should be apt as per the Mobile Standards
- Project Deliverables
 - User Manual
 - Training
 - Mobile App Setup/Installation

6. Annexure

a. Sample Progress Report

Project No: _____

User: _____

Date: _____

Progress Report

S.N.	Activity	Completion Date	Remarks

Submitted by

Signature: _____

Name: _____

Desig: _____

Phone: _____

b. Completed items checklist

SNO	ITEM	COMPLETE (YES/No)
1.	Landing Page	
2.	Secure Login	
3.	Home page	
4.	DAILY REPORTING module for Order booking; Meeting (Project/Architecture) & Follow-up	
5.	DISTRIBUTOR STOCK	
6.	DAILY EXPENSES	
7.	PAYMENT COLLECTION	
8.	PRIMARY SALE	
9.	MONTHLY TOUR PLAN	
10.	REPORTS - Attendance report	
11.	REPORTS - Daily Sales Report	
12.	REPORTS - MTP Report	
13.	REPORTS - Distributor Stock Report	
14.	REPORTS - Retailer Information	
15.	REPORTS - Retailer wise Sale Report	
16.	Check Out	
17.	COMPLAINT/FEEDBACK ABOUT	
18.	UPDATE AN APP	