**Elixir CRM**

**Purpose:**

This project used to capture the incoming outgoing and missed calls of the laboratory in a common repository. And try to categorize and derive the purpose of each of the calls.

The outcome of this project is for admin to get the perspective of how many calls from the patients are attended and missed and also the app should have the logic to figure out how many missed calls are called back. And the purpose of each of the calls that are received with if there is any action required against each call.

**Technology specification:**

1. Only Android App users
2. To be hosted as a separate link in the same Elixir ERP and build using ASP.Net UI and Rest API with Google Spreadsheet as a DB. --MySQL
3. No Android App development is in the scope. We will use Automate App as the event to capture the call details.

**Android User Use Case: (**From mobile perspective or the event that will trigger this activity)- **[4+8 hrs]**

1. **Automate** app will be installed in all the Android devices of the lab
2. whenever there is an incoming outgoing or ***missed call*** happens in the mobile, automate app's 'http request' hook will make an API call with some of the static variables (identifier for that mobile), phone number that we attended or missed, datetime
3. Sample of Data that will be passed in the API {Lab Name, Phone Number, DateTime, Call Status, Duration of the Call} - Additional \*
4. [How to check if the automate is running or not via automation- send msg if stopped]
5. this is the the event that will notify to our API stating the dump of the phone calls that been received in a particular lab mobile
6. When calling API, there need to be other HOOKS in the Automate App configured that runs in parallel fork to trigger Missed Call alert to a CRM Phone number as SMS and a email to the CRM email group.
7. Example: if a call is missed by lab TBM, the Automate App will log an entry for the missed in Spreadsheet via API call. In parallel, a SMS with the missed call details will be sent to the Ops Manager Mobile and an email will be sent to the Ops Manager Email. (This all can be done via Automate App). *But need a small POC before we proceed further as this is the BASE FOUNDATION on top of which we built everything further.*

Assumption :

All calls will be saved in API , Only Missed Calls to be sent to sms & mail to be sent to CRM mail

Gmail will be used for sending mails.

Automate :

Mobiles should be able to run the automate app without any restrictions

**Core API**: (The API developed using dotnet core/ http post) [10 hrs - development with mysql connectivity]

1. This API will be invoked by the automate app
2. This API will get the required parameters as the input and it will do insert operation on to the spreadsheet with the details received
3. this operation is only insert and there is NO update or delete required via this API

DB : **Mysql, only POST Call in API - but we require PUT, GET calls for below requirements**

Check the platform for costing - .network & .net core

**CRM UI (**This will be one additional tab in our existing elixir ERP web application)

1. There will be 1 lab view and one report view for Admin
   1. Call Log View:
      1. Missed Call Only : Checkbox : YES or NO. There need to be a checkbox that states missed only to display or not. By choosing Yes, only missed call display. But choosing no, all calls displayed (including missed call). - Can we replace with filters ? - Should be a checkbox
      2. This view will display the report of all the calls that are missed in the grid view. when displaying the record as grid from the spreadsheet, there need to be 4 additional columns auto generated (view only columns). It will be calculated based on the logic to arrive whether the missed calls has been called back.
         1. if so it has to have one column stating 'yes it has been called back',
         2. on the next column stating when was that called back.
         3. And the duration between the missed vs called.
         4. And from which number it was called back.

* Complex requirement: Check Missed calls list, check if the no in mis call list available in the outgoing list with duration >0 , time at call missed vs time when call outgoing , outgoing source no.
* Can we achieve this with a scheduled job? - frequency ?
* Can we achieve this in UI with a user action ? - btn click -> reconcile calls and update the last column.
  + 1. This has to be generated real time on the fly - [How to handle Inconsistency in Data, Ex: can the call reconciliation be done on a day to day basis/Time basis ]. considering the system performance, it can get saved in the same spreadsheet upon first time calculation. [Complexity depends on above point]
    2. (This is common for both call log and missed call view) Again 3 additional actionable columns has to be added to the same grid(editable columns). it will have additional columns included requesting the lab users to give the Purpose of the call and the action/ status of that call. And comment column.
    3. We want this to be preferably in a jQuery grid with sort and filter feature. This action column can be inline edit or can be a popup edit. But considering the auto refresh of the grid enabled with 1min time interval, we guess it will be nice to have a popup edit. Else the inline edit data might be lost when the grid auto refresh - If inbuilt mvc grid isnt feasible the development time may get increased
    4. this grid has to auto refresh every 1 minute (this timeline can be configured in the config file) to capture the latest of updates within UI - this has to be checked on how to achieve this functionality
    5. Filter need to be based on date range, Lab, Action Item (dropdown) - If inbuilt mvc grid isnt feasible the development time may get increased

Admin View:

This will be a management view with report and chart to take right action based on the input

* 1. Number of calls attended per lab (or all) for a period
  2. Total number of calls received/ missed per lab (or all) for a period
  3. Number of calls missed per lab (or all) for a period
  4. Avg duration between call and missed
  5. Call Purpose per lab (or all) for a period - From user input in lab view
  6. Call Action Item per lab (or all) for a period - From user input in lab view

Chart poc has to be done before and to be confirmed for the Preferences of charts .

Auto refresh on charts ?

Minimum 3 charts