

Business Requirement Document

for

Online Health Tech Platform



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INDEX

Sr No	Description	Page no
01	Executive Summary	03
02	Business Objectives	03
03	Scope	03-09
04	Product Architecture	09-11
05	Specific Features	11
06	Functionalities	12-13
07	Technical Specifications	13-14
08	Flowchart Diagrams	14-19
09	MIS & Reporting Requirements	20-21
10	Miscellaneous Notes	21
11	Delivery Schedule & Phases	21

Executive Summary

The company is an Online Healthcare start up which aims to build an online bridge between the doctors community & the common man. The online platform will be shaped up like a digital listing directory of doctors across India, where doctors will share their profile, articles, blogs etc. The doctors here will also offer certain plans online. A common man or visitors on the website will be able to search, give & read reviews, read blogs. Visitor can select a doctor and even buy a plan on this platform itself.

Business Objectives

The company's platform would eventually evolve as

- An online directory of doctors across India

- Provide easy & relevant searching of doctors

- Knowledge sharing between doctors & visitors by way of articles, blogs, questions & answers etc.

- User engagement on the platform by way of social media integration & features likes, ratings, reviews etc.

- Facility of Online buying of doctor's plans by visitors & users

Scope

The Online platform will have the following components :

Front end

- Website

Back end

- Listing Directory

- Search engine

- Profile Management – Doctor Profile & User Profile both

- Transaction Management – online payment, invoicing & records

Blog

Writing rights to Doctors & Mini Admin

Moderation / approval rights with Mini Admin & Admin

There will be 4 types of Users in the entire ecosystem –

Visitors or Users – Anyone who visits the website is a visitor but the moment he buys a doctor's plan, he becomes a registered User. If we look at the concept from e-commerce angle, users will act as buyers.

Doctors – Doctors will act as sellers in our system. They will promote their profile, interact with the audience & sell their plans online. Doctor's will be able to write blogs too.

Mini Admins – They will be like Admins but unlike Super Admin, they won't have all the rights. Certain functionalities & rights of Mini Admins will be defined/governed. The right governing can be controlled at Super Admin Level.

Super Admin – It will have the complete access to the system.

The detailed scope of development includes:

1. Home Page

- a. Home page would typically comprise of following
 - i. Company Name, Logo, Brand Aesthetics
 - ii. Call to action points
 - iii. Lead form/ contact form
 - iv. User / Buyer Sign- in
 - v. Doctor Sign In
 - vi. User Registration/profile creation
 - vii. Doctor Registration/profile creation
 - viii. Doctor Search widget – Search option will be available for users /buyers to search Doctor in an area, locality or city
 - ix. Conceptual Texts like – What we offer, Who we are, Why it works, How it Works etc.
 - x. Blogs/Articles
 - xi. Questions & Answers
 - xii. Advertisement Space / Banners
 - xiii. Footer panel – showing about us, contact us, careers, listings for SEO purpose – Locality based listing, City based listing , State based listing etc

2. Doctor Registration

- a. On the website, when someone will click on Doctor Registration, he will get a web form for registration.
- b. Doctor will be able to perform on-line registration by providing following sample attributes.
 - i. Doctor Name, Address, Phone Number , e-mail
 - ii. Consulting Category , ie: doctor type – physician, ortho , homeo, dentist, dietician etc
 - iii. Qualifications/ degrees (tabular format)
 - iv. Experience (break up table)
 - v. Currently Practicing at (multiple addresses, clinics, hospitals etc can be updated along with the timings of each location)
 - vi. Photograph
 - vii. Social Media links of doctor
 - viii. Website of doctor, if available.
- c. After registration is successful, Doctor will receive a welcome mail on his registered e-mail address containing user-id and password for account management. This information can also be shared by SMS too. Doctor's listing will be visible on website thru "Doctor Directory" only after verification & approval by admin.

3. Doctor Profile Approval

- a. Doctor details will be verified and validated by customer care/ mini admin.
- b. After the Doctor submits the details for registration; the right to change the details freezes till request is in-progress with customer care. But Doctor can change the submitted data with help of customer care.
- c. All changes & editing in the profile will be moderated and governed by mini admins/admins.

4. Account Management (Self Care)- Doctor Profile

- a. Doctor will have ability to manage his profile. Profile update will be reviewed by Customer Care/ Administrator and after approvals, these changes will be visible to users/visitors. Profile management will have following sections.
 - i. Profile Section: This section allows Doctor to manage following.
 - ii. Doctor Data : Name, Address, Photo, Description, Credentials, Education, Awards, License/Registration numbers, Skills etc.
 - iii. Resources : Articles, Videos (Embed code), blogs etc
 - iv. Password Update (after our verification any details in the account can be changed by our consent .

- v. Service Section: Categories served, Service Area setting, multiple addresses of clinics, nursing homes, hospitals & their timings in tabular format.
- vi. Package Section : defining the rates & various plans of family packages/plans which will be the product for sale on our platform.Fee & Package Plans Compensation. These plans will also have a BUY link shown very prominently.
- vii. Payment Section: Listing Set-up fee, Invoice. if in future we wish to charge doctor for listing, we may make the provision for the same.

5. Doctor Search & Directory

- a. Buyer will have search fields on home page. Search box will auto prompt text when typing something in the search box. The auto prompt or search can be done on given below fields:
 - i. City (google widget will auto publish the area as per the search location, but user can modify it)
 - ii. Locality (google widget will auto publish the area as per the search location, but user can modify it)
 - iii. Postal code (It will be auto-populated as per the city selected)
- b. Directory: Based on search criteria& nearly matching the search parameters, Doctor will be fetched from the database and shown to users with following information. State as well city / town level directories will be created which will have bread crumb navigation.
 - i. Doctor Name, Doctor photo, Address, Phone Number, Distance from user's search box location
 - ii. Doctor Name will have link to Profile Page
 - iii. Small Google map showing the Doctor location, on clicking it will expand
 - iv. Doctor Rating with Likes, Count & Reviews
 - v. Search Criteria
 - City
 - Locality
 - Postal code
 - vi. Filter Criteria (after the search is performed, user may further refine his search based on certain filters as below)
 - Distance (0-5 kms/ 5-10kms/ 10-15kms/15-25 kms/ 25+kms)
 - Pricing of packages
 - Consultant Type

- Doctor Name
- c. To start with the listing of doctor's will be FREE but If in future we make the provision of paid listing for doctor, in that case when search will be performed, matching doctors who are Paid Doctors will come on upper section of Directory. We shud build that logic in the system since beginning.
 - d. Doctor will be sorted on distance and Doctor with minimum distance from search box location will come on top.
 - e. The distance will be approximate value in km based on latitude and longitude of location available & it will be shown when the search listing will appear.
 - f. Distance will purely depend on latitude and longitude of source and destination area.

6. Doctor's Profile

- a. Profile will have following attributes
 - i. Doctor name, location, distance from search place, description, logo, Tagline,
 - ii. Doctor Location on Google map as suggested it will be directly searched from the google ./ we may use some widget for it.
 - iii. Doctor Additional Information like Doctor license/registration number, Education, Certification , experience, practice locations etc
 - iv. Point of Presence (POP) which means Service area
 - v. Social profile links
 - vi. News/Events & Awards
 - vii. Doctor Articles/blogs
 - viii. Photo gallery if any
 - ix. Charges/Fee of the Doctor
 - x. Location wise / POP wise days & visiting Hours
 - xi. POPs/clinics/hospitals details
 - xii. Doctors like, reviews, Rating with count
 - xiii. Q/A Form with Discussion Forum
 - xiv. Share Doctor Profile to Social Media/E-mail
 - xv. In case, the Doctor/Doctor is having a multiple service area like multiple POPs ; provision for the same.
 - xvi. License and Registration like MCI, IMA, DMA regnetc
 - xvii. packages/ Plans offered by doctor
 - xviii. buy link for the package/plan

7. Administration

- a. Lead Management: Leads will be coming from the filling of web form of "Enquire Now" available on the website. This will take just Name, no, e-mail ID from the user. All leads will be received in the system and managed by Administrator or Mini Admin.
- b. Mini Admin / Administrator will verify the lead. – this will happen offline.
- c. Administrator will handle the lead Offline, away from the system and help the user come back and buy a doctor's package/ plan.
- d. Buyer/User will be notified thru mail (to be done offline) with list of Doctor and link to buy. To be done offline.
- e. Monthly invoicing and Payment sharing computations will be generated to show all plans sold and amounts received. An MIS for the same will be generated at ADMIN.
- f. Doctor Management:
 - i. Search Doctor
 - ii. Manage Doctor (Profile Active/Deactivate)
 - iii. Profile Modification
 - iv. Verification
 - v. Listing fee Management
 - vi. Package & Plan Management
 - vii. Invoice Generation & payment MIS
 - viii. Payment to Doctor
 - ix. Master Data Management
 - x. Basic Reports i.e. Doctor By City/State, Doctor By Payment Status, Doctor By Rating, Leads By Location, Leads By Status
 - xi. Some kind of tie with payment gateway / credit card companies so that the payment can be made online .
 - xii. Merging of multiple profiles of same doctor
- g. User/buyer Management:**
 - i. Search User
 - ii. Manage User (Profile Active/Deactivate)
 - iii. Profile Modification
 - iv. Family members, medical history management & modification
 - v. Package & Plan Management
 - vi. Invoice Generation & payment MIS
 - vii. Master Data Management
 - viii. Some kind of tie with payment gateway / credit card companies so that the payment can be made online .

8. Buyer Profile

- a. There will be a section where buyer can sign up or register his profile. On clicking the sign up, the buyer will be asked to fill his name, mobile no, e-mail id, city and Submit.
- b. Buyer/User account will be created once he submits Name, Mobile no, email, city and proceeds.
- c. Buyer can add or delete or modify members and his details, till the time is approved by admin or mini admin.
- d. Once approved, buyer can only modify or add or remove the details but not the member names. Family members' name would freeze once approved by Admin.
- e. If a buyer has a plan which permits him to add up to 6 members, he may not add 6 in one go and can add it later on. But once a member is added & admin approves it, no changes can be done in the member name.
- f. Further the user will have to provide descriptive information of all members of the family & about himself. This can be done in bits & pieces but all the information will get stored.
- g. Within his own profile, Buyer will be able to view the doctor whose plan package he has purchased.
- h. Buyer will be able to view the contact detail (phone/mail) for only that doctor whose plan he has purchased, before that doctor's contact info will not be visible to user.

Product Architecture

The front ends of the product would be Website & Blog.

Website would have 5 elements :

Doctor Search (which can be done thru search box)	Doctor Registration (profile creation, profile modification & profile management)	Doctor Log In	User/visitor Registration	Registered User Login
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<p>Upon Search query, the search will be performed in the doctor database and matching doctors will be listed in summarized form.</p>	<p>Doctor Registration can be done by a doctor as well as mini-Admins</p>	<p>If a doctor who is already registered logs in, he would land at his Login index page.</p>	<p>User Registration can be done by any visitor by filling some attributes. This can be done at 2 places - one by direct registration and second while making a plan purchase.</p>	<p>If an User who is already registered logs in, he would land at his Login index page. Further he can add Family members & medical history etc.</p>
<p>Upon selection / clicking on any doctor in the above list, the detailed profile of the doctor will be published.</p>				
<p>Package Plan offered by the doctor can be purchased here. If the plan purchase is being done by a Registered User, it will proceed whereas in case of any unregistered visitor, it would ask for the basic profile creation details and then move to payment/purchase level.</p>				

Check - [Architecture.xlsx](#)

Blog can be written by any doctor but will be published /visible only after approved by mini-admin.

The back end of the platform will have 5 components

Doctor Database Management	Registered User Database Management	Plan & Pricing Management	Lead Management	Blog, Articles, Questions & Answers Mgmt
database & profiles of all doctors, their attributes, their blogs, their packages plans etc	database of all registered users, their family members, medical history database, matching doctor relationship	Package Plans , mapped to each doctor/ Listing Fees of doctors/	all leads captured thru Enquire with Us web form.	moderate, approve, reject, publish, edit rights with mini admin & super admin only.

Specific Features

The following specific features will be a part of the system.

1. Auto prompt text while filling city, area name or pincode
2. Registration (doctor & user both) and Login thru Facebook & LinkedIn
3. Count of profile views to be shown in doctor profile/ count of how many times, the detailed profile page of a doctor is opened.
4. Like a doctor / count of likes to be shown in doctor profile
5. Rate a doctor / rating by any registered user on a scale of 1 to 5 stars. Average rating to be shown in doctor profile.
6. Reviews on a doctor / subjective reviews of upto 200 words maximum can be submitted by any registered user. This will also be tagged in doctor's profile.
7. If a registered user buys any package or plan from any doctor, that doctor will be mapped to the user and they will be visible under each other's profile.
8. On the event of a package or plan purchase, the transaction details have to be recorded in the user's profile.

Functionalities

User functionalities will be as follows :

Visitor	Registered User	Registered Doctor	Mini Admin	Super Admin
Browse website	Browse website	Browse website	Manage Leads collected thru enquire web form	Can perform all the actions of all the other 4 category of users
Submit lead thru Enquire with us web form	Submit lead thru Enquire with us web form	write blogs & articles	Manage profiles of registered users but no editing or deletion rights	
Read blogs & articles	Read blogs & articles	View own profile	Manage doctor's profile , having editing or deletion rights & approve the modifications done by doctor	
Search doctors	Search doctors	Edit/manage own profile	Manage listing of doctors & listing fees from doctors	
Filter the search list basis certain parameters	Filter the search list basis certain parameters	Manage packages/plans to be offered by him	Modify, approve or reject blogs, questions, answers	
View doctor profile	View doctor profile	View the list of registered users who have purchased a doctors plan		
Select a doctor	Select a doctor	view detailed family profile of buyers		
Select a plan && buy package plan	Select a plan && buy package plan	Give answers to questions asked		
Ask questions from a doctor	Like a doctor			
Share doctor on social media	Rate a doctor			

Submit Reviews on any doctor
Ask questions from a doctor
Create detailed profile
Add family members
Add medical history under profile

Technical Specifications

The following portion of the document deals with the technical aspect and requirement of the project.

We have to concentrate more on our Front End and BackEnd as well as the security aspect for our project. Search Engine algorithm is also a priority thing for it.

1. Back End Technology:

For the backend or the database, we will go with PostgreSQL with security certificates provided for it.

2. Front End Technology:

For the front end coding, we will use Core Php + Wordpress as the CMS. For the designing part, we will go with HTML5, CSS3, Bootstrap.

3. Interaction b/w BackEnd and FrontEnd:

For the interaction between FrontEnd and BackEnd, we will code in Java Version-1.7.

4. For Indexing:

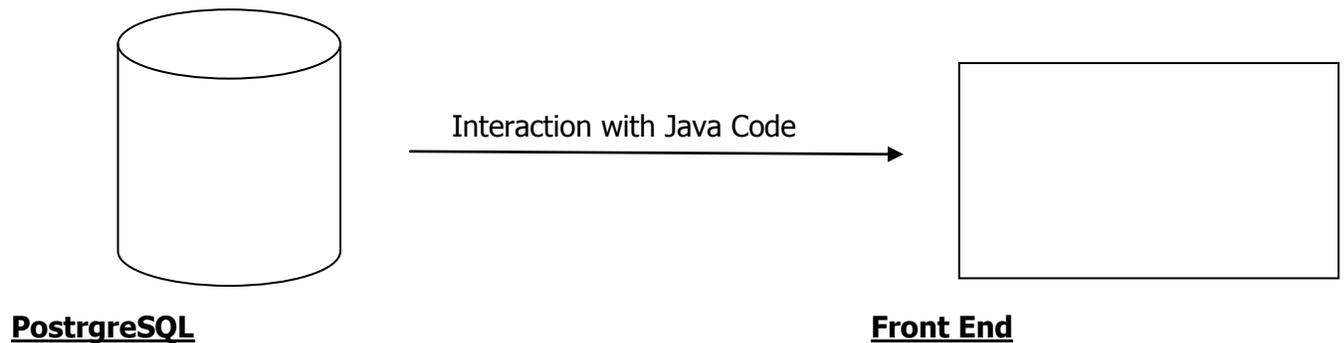
To make our application more smart and intelligent for indexing, we will go with **Apache Lucene** which is written in Java and also compatible with it. It was also used by Google for indexing till 2012.

5. Server

As, we have to use an application server, we have a lot of good open source servers available in the market.

But as per the recommendation, we should go with either Glassfish 3 or WildFry(RedHat server).

Component Diagram for the application:



- When a user logs in to the page and enters a username/password, it must call a filter first to check the authentication then should be redirected to the appropriate Servlet. This is applicable for the users/doctors/admins.
- Session Fixation issue should be looked on the highest priority which is the most prone security threat. We must close the session and each time a request is called we must check the JSessionID.
- The user should be able to login with access through their Facebook id, Google+ id and LinkedIn id. We need to get the access of the web services of Facebook, Google and LinkedIn for it (Need a clarification on it from Mr Sarang)

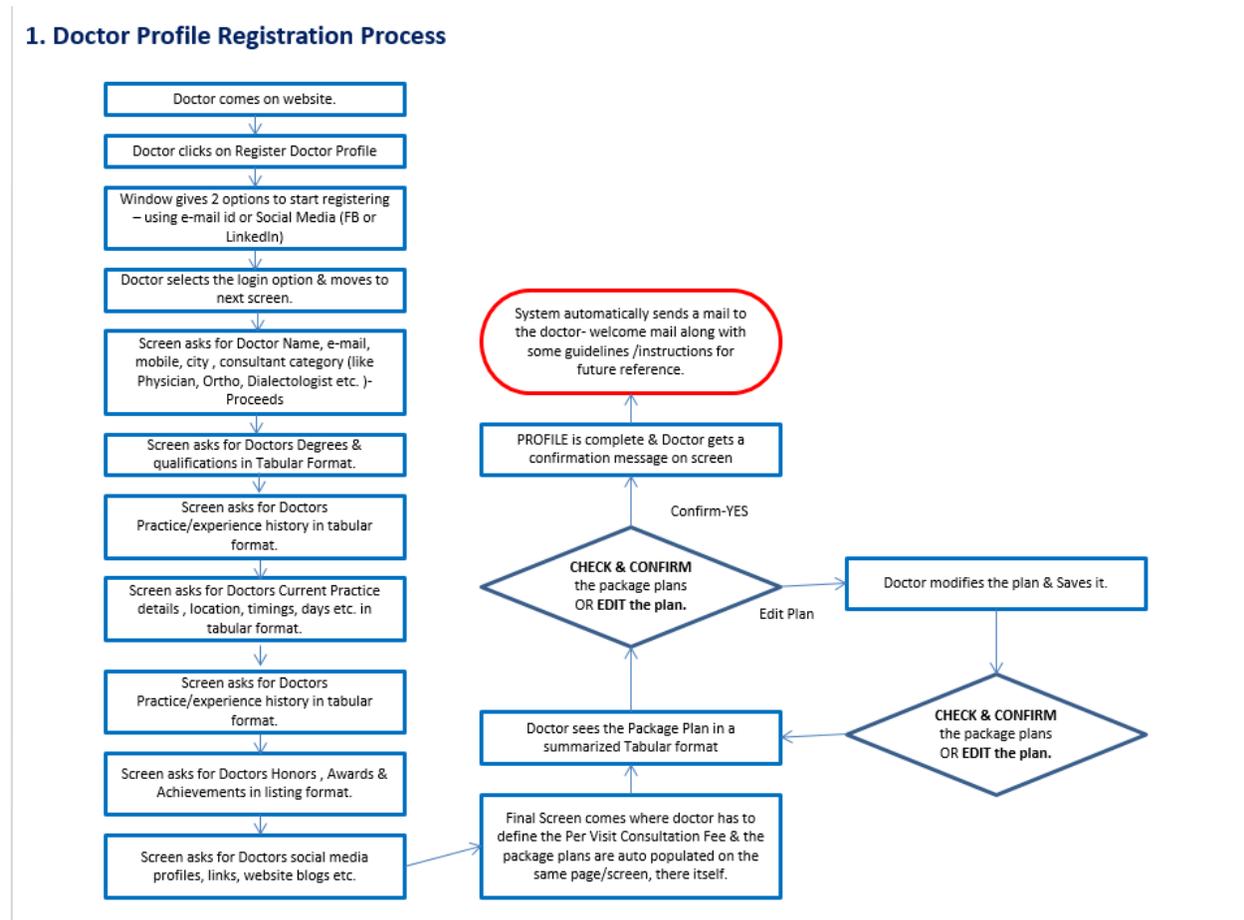
Flowchart Diagrams

In the entire system, there would be 5 primary process/activities happening.

a. Registration of Doctor Profile

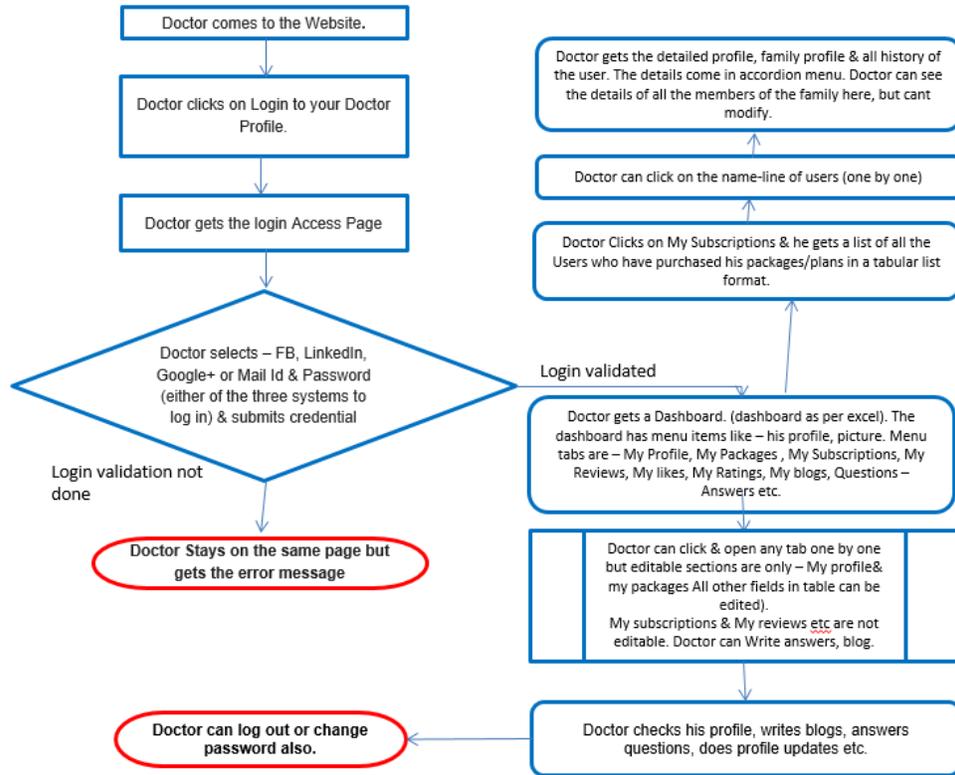
- b. Login into own profile by doctors & do profile management
 - c. Registration of User Profile
 - d. Login into own profile by Users & do profile management
 - e. Doctor searching from the listing directory by any visitor or user.
- The flow charts of the above core processes are illustrated below.

1. Doctor Registration Process



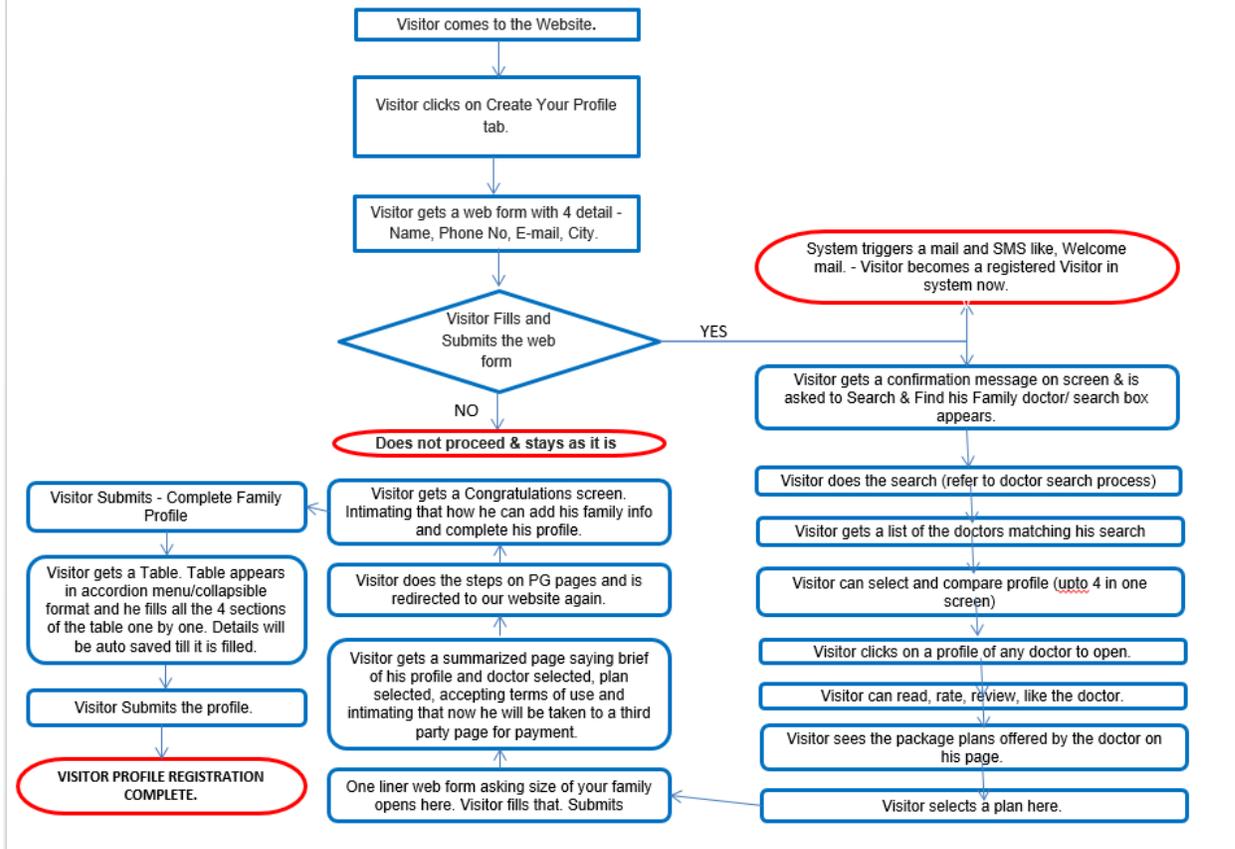
2. Doctor's Profile Management

2. Doctor Profile Management Process



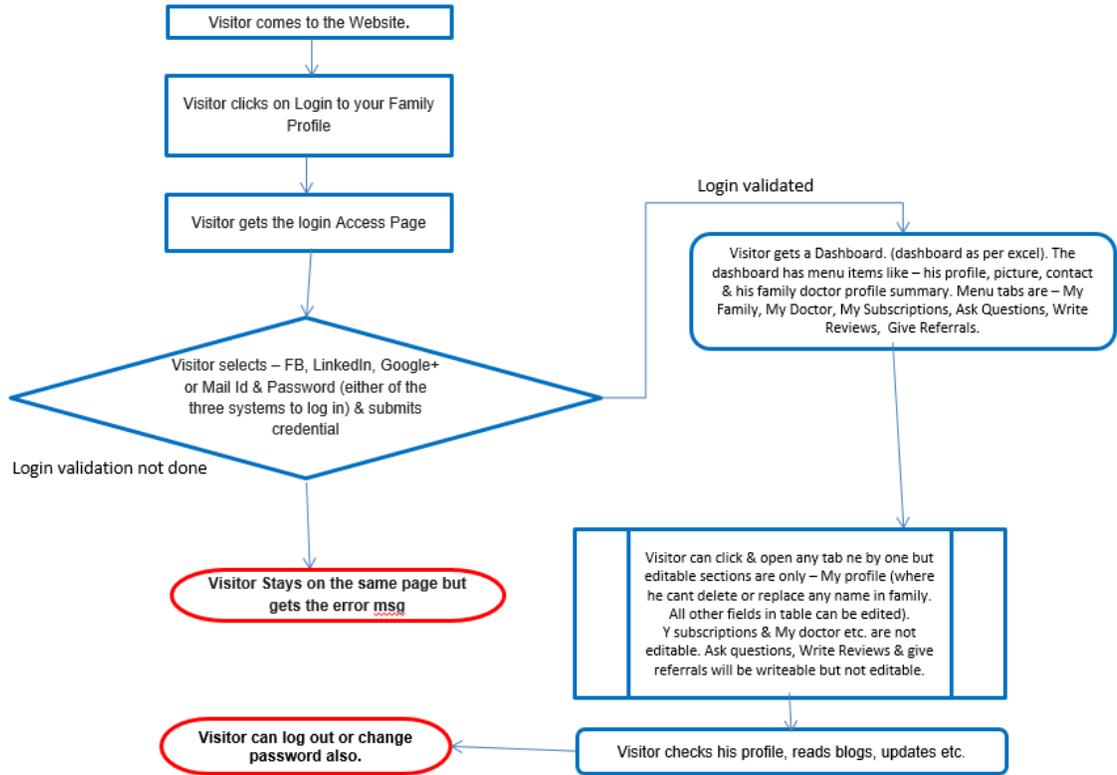
3. Visitor Registration Process

3. VISITOR PROFILE REGISTRATION PROCESS



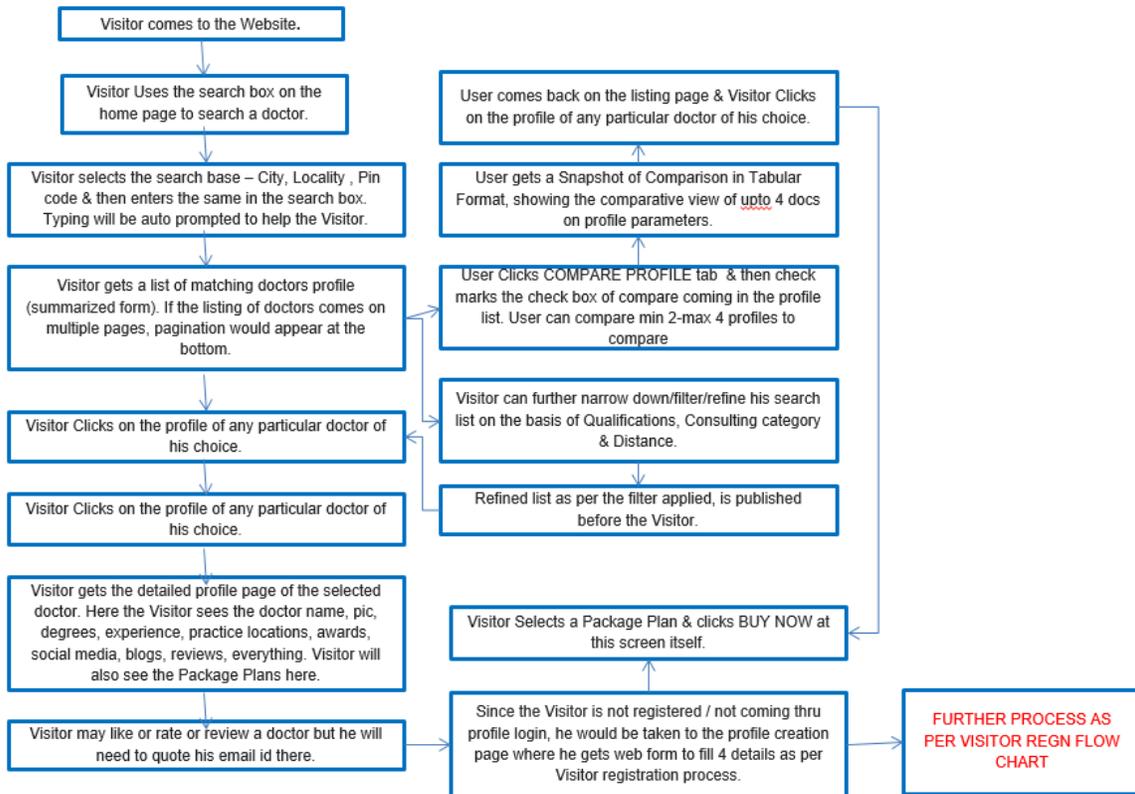
4. Visitor Profile Management Process

4. Visitor Profile Management



5. Doctor Searching Process

5. Doctor Searching Process



MIS & Reporting Requirements

The following reports will be required to be generated at Super Admin level. The reports would appear in tabular format and also there should be a functionality to export all these reports in excel format.

LEADS REPORT

(to track all the leads being submitted thru enquiry web form on the website)

Date of Enquiry	Time of Submission	Name	Mobile No	E-mail	Source Page of the website

PROFILE VIEW REPORTS

(to track which doctors are being viewed the most& how we can promote them)

Doctor Wise

Doctor Name	Today's Profile View	Till Date Profile Views

Date Wise

Date	Doctor Name	Count of profile Views on the day

TRANSACTION REPORT

(to track all the plan purchase transaction being done on the platform)

Date	Time of plan purchase	User name	Mobile No	E-mail	City	Plan Type	Plan Amount	mode of payment	Doctor Name

DOCTOR PROFILE CREATION REPORT

(to track all the registrations done by doctors & push them in building their profile)

Date	Doctor name	Mobile No	E-mail	City	Profile Completion level	Profile Status - Active/Inactive

**USER
PROFILE
CREATION
REPORT**

(to track all the registrations done by users & push them in building their profile)

Date	User Name	Mobile No	E-mail	City	Profile Completion level	Plan Purchase Date	Plan Type

Miscellaneous Notes

SEO Optimized: simple & easy to control site URL structure as well as page attributes like title, description, meta descriptions etc.

HTML5 /Responsive Design : Optimal viewing experience across a wide range of devices (from desktop computer monitors, tablets to mobile phones)

Secured: Authentication and Authorization in administration area as well as Doctor Account Management. Encryption transport protocol for sensitive data like password, credit card information.

Subscription Management (i.e. Listing Fees of doctors & Package Plan Pricing)

Pagination would come wherever the content is spread over multiple pages.

MIS – Reports shud be exportable into excel file.

Design & layout will be provided by us and the same has to be followed.

Delivery Schedule & Phases

Phase 1 – Website & Blog (front end ready)

Phase 2 – Doctor registration, profile creation, profile management, doctor listing fee mgmt, package plan management

Phase 3 - Users registration , profile creation, profile management, plan buying, mapping of doctor-user

Phase 4 – Integration of entire ecosystem, payment, invoicing, leads, MIS & reports

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