Online Cancer Treatment Plan Generation

Description

In India cancer specialists’ i.e. Oncologists (doctors who specialize in cancer) are around 1250 and active cancer cases are 13.7 lakhs.

For treatment of cancer there is a standard way of treatment, oncologists develop a treatment after the diagnosis and they follow the same until any changes required. So the treatment which oncologists plan can be done on the patient through general locally

available physicians / hospitals as well if they have a treatment plan designed by an oncologist.

So Considering above, we will develop a system where a cancer patient’s relative or anyone having access to patient documents  can upload those on our website and wait for a treatment plan advised by a doctor registered on our system.

Modules

Public website

The website should contain a form for requiring patient details from the visitor. Below should be form fields.

Form Fields:

1. Full Name (Required, Text Field)
2. Password (
3. Email (Required, Email validation, Text Field)
4. Contact Number (Required, Indian phone number validation, Text Field)
5. State (Required, Dropdown List, all indian states)
6. City (Required, Dependant values based on state selection)
7. Address (Required, Textarea Field)
8. Pincode (Required, Indian Pincode format validation using regex or similar)
9. Type of cancer (This should dynamic from backend, like anyone can add or remove a certain type of cancer based upon doctors availability against the cancer type)  
   (Required, dropdown)
10. Documents : Can be an image file, pdf or video. Allow multiple file upload with size upto 10mb each file  
    (Required, File type validation)

Backend dashboard

Create one admin panel with single hard coded admin credentials. Admin can control following modules:

Cancer types

* Create CRUD for cancer types

Doctors

* Create CRUD for doctor CRUD

Fields for doctor module

1. Full name (Required, Text Field)
2. Email (Required, Email Address, Text Field)
3. Password (password will be auto-generated)
4. Specialization for cancer (dropdown from cancer types)

Note: password will not be input from admin. Passwords will auto generated by the system while adding/creating doctor records. Once record is created by system then send email to doctor email with login details as follows

* Username: *email mentioned while creating account*
* Password: *auto-generated password*

Doctor module:

Login

Doctor will use username and password received on email

Enquiries

Show all the enquiries based upon doctors specialization ie. if Dr John is specialized in neck cancer then only enquiries for neck cancer will be viewed by Dr John

Plan Generation

1. If a doctor views the enquiry then show a ckeditor and allow him to create a plan.
2. Once a doctor creates a plan no other doctor should be able to edit the plan or create a new plan for that inquiry.
3. Once a plan is created make a pdf of it and email it to the person who enquired for it with all the contact details of the doctor who created it .
4. Also the plan should be available as pdf for download in the enquiry detail page once its been created.
5. If a plan is edited again by the doctor, send the new plan to the person who enquired for it and generate a new pdf alongside the old pdf.

Additional Requirements (Optional) :

1. Its would be good if developer utilizes queues for sending emails
2. Also a notification broadcast will be appreciated for the online users that a new enquiry has been received
3. Eloquent relationships & collections methods can be utilized wherever necessary
4. Migrations for all the tables
5. Seeders for generating a admin user and pre enrolled doctors and cancer types

Important Notes

* Please add client side and server side validations in all the forms.
* **Ensure security aspects, server side pagination with per page 10 pages.**

Technology stack

* Laravel / Codeigniter / Any PHP MVC Framework
* MySQL
* HTML
* CSS
* JQuery
* Bootstrap

Duration: 18 hours