

# **Diagnostic Center Client Management (DCCM)**

## **Feasibility Report**

### 1. End-user, Clients, and Sponsors –

- Clients  
The clients for these applications will be any hospital that provides diagnostic tests and independent diagnostic centres.
- Sponsors  
The hospital administrators will sponsor this application as it will make their business smoother and easier.
- End-Users  
The end users are patients here, who would wish to use the services provided by the diagnostic centers.

### 2. Project Planning and Budgeting –

#### Project Planning –

The program aims at bridging the gap between the diagnostic center and end-users. It is essential in today's world where technology is taking over most domains. The project requires rigorous planning so that the execution can be smooth.

End-users expect security of their data while clients want the process to be faster and easier for them.

Some competitors in this domain are [Alosan](#), [EliHealthMR](#), [DoctorLive365](#), etc. To set us apart from the competition, we are ensuring better security and easier navigation within the website. The website is going to be easy-to-use and will ensure maximum transparency between the clients & end-users.

The website has clear requirements from the end-users. However, resources that will be received from the clients is not very clear. This is due to the privacy policy that varies for different diagnostic centers. Knowing this, a Waterfall approach or even an Iterative approach could help to move this project forward. Initially, a Waterfall approach will be tested. Consequently, merging of Waterfall and Iterative approaches will take place.

The project will involve a hierarchical structure. The project has one leader who will ensure that the project is moving at a sensible pace and that deadlines are being met. The project team will be divided to ensure that work is done parallelly in order to finish the website faster. One team will take care of the client end while another will handle the end-users. Integration of both will be done towards the latter half of the project.

Once the website is up and ready to run, it can be used indefinitely. However, there will be periodic updates which will be intimated to both the clients and end-users. Throughout this process, the sponsors will be updated about any and all changes being made.

All communication w.r.t the project happens via mail. All updates made to the code are committed to a GitHub repository. This ensures that separation of work is done clearly.

### Budgeting –

The project has to consider the following points in order to come up with a workable budget –

- a. Compensation for the project manager.
- b. Compensation for the project architect.
- c. Compensation for the developers.
- d. Cost of equipment.

### 3. Scope –

#### ❖ Inclusion –

For the two roles (clients & end-users) there are specific features that the website intends to include.

#### End-User Functionalities

- a. Login (Create Account):
  - Login using username and password.
  - If the end-user doesn't have an account, he will be asked to create an account by giving his details (mail-id, name, address, mobile number).
- b. Choose a location:
  - The end-user types his location in the text box.
- c. Choose tests
  - The app will show all the tests that are available close to the location entered.
  - The end-user can choose the test(s) you want to take up.
- d. Choose Diagnostic Centre
  - Depending on the location and the tests were chosen all the diagnostic centers will be visible to the end-user.
  - The user can choose the center that is convenient for him.
- e. Select date
  - The user will be allowed to enter the date on which he wants to get his tests done.
- f. Select time
  - On a selected date the diagnostic center's schedule will be available indicating the slots at which the requested test will be conducted.
  - The user will select one of the given slots.
- g. Depending on the test, you can choose whether it's to be done at home or at DC.
  - If the test that the user has requested can be done at home, a checkbox is provided.
  - If the user wants to get the test done at home, he checks this box.
- h. If it's at home, the Lab Assistant will be assigned.
  - If the user checks the box, he will be assigned a lab assistant the name and the phone number of the assistant will be made visible to him.
- i. Otherwise, the appointment will be booked.

- If the box remains unchecked an appointment is booked with the diagnostic center.
- j. A confirmation message of the appointment/lab assistant will be sent as a notification to web-app/email.
  - The user will receive a confirmation mail and a notification on the app once the appointment is approved by the diagnostic center.
- k. Billing
  - A bill will be generated and displayed to the user.
- l. Payment
  - The user has the option of paying online or paying using cash.
  - If he chooses to pay online, he will be taken to a payment gateway.
- m. Cancellation
  - The user is allowed to cancel his appointment 12 hours before the time of the appointment.
- n. Report
  - The test report is mailed to the user.
  - The user receives a notification on the application telling him that the report has been mailed to his registered email-id.

#### Client Functionalities –

- a. Personal Verification
  - This will be done manually by our team, to make sure the diagnostic center (DC) is certified to conduct medical tests.
  - Only after this verification, DC is accepted as a client.
- b. Login (Create Account)
  - Each DC will be provided with a username and password once the verification is done. Client login can be done using this username and password.
- c. Template
  - A template is provided to the client in the form – Date, Time, Lab Test, Rates, Maximum No. of Patients, Lab Assistants Availability.
  - The client creates a schedule for a given day according to this template.
  - The schedule is updated every 72 hours.
- d. Upload Button
  - The schedule can be uploaded through the web-app.
- e. See Schedule
  - The uploaded schedule for the current day, the next day and the day after is made visible to the clients and to the end-users.
- f. Report
  - The report is uploaded by entering the password.
  - The report is sent to the email ID of the registered user.
  - The format for the uploaded file must be of the form PatientName\_LabTest.

#### ❖ Exclusions –

- Actual conduction of tests or generations of reports is not done by this website.
- Assignment of lab assistants or hiring/firing of lab assistants is not taken care of.
- Schedules for lab tests are not done.

#### 4. Potential Benefits –

The main aim of this application is to provide ease and comfort to various users. The following are the kinds of people that will explicitly gain from our software:

- ❖ Hospitals and Diagnostic Centers: On registering with our app, their visibility among generic public will increase and this will help in providing additional potential patients/customers. Their management load is shifted from their end to the application end.
- ❖ End-Users: It provides a hassle-free experience to the direct end-users. It provides them a platform that acts as a one-stop solution.
- ❖ Doctors and Lab assistants: It provides additional roles and responsibilities and increases job opportunities for the take-test-at-home lab attendants.

Logistic benefits:

- ❖ Paperless consultation or prescriptions.
- ❖ Automated communications (Emails & SMS) to patients.
- ❖ Rescheduling appointments.
- ❖ Find Doctors, Clinics, Diagnostic centers, labs and hospitals in any location.

#### 5. Resources Needed –

This project requires committed staff in order to make it a success.

From the client end, an admin is required. The admin will update the schedule and send the reports to the end-users. The client must also provide lab assistants and necessary equipment for doing tests at home.

The project team in itself must be qualified and experienced in order to efficiently execute the project. The team must include programmers, graphic designers, database administrators, system architects, and risk advisors.

The project timeline will be as follows –

Week 1 – Feasibility Report submitted and reviewed.

Week 4 – Basic UI structure ready.

Week 5 – Backend integration.

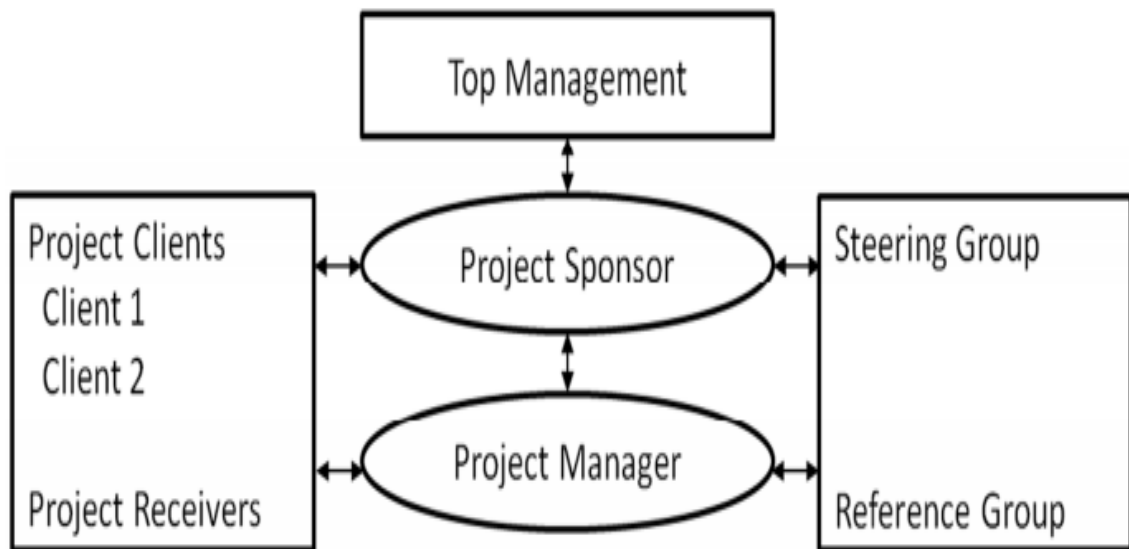
Week 7 – Testing done for both roles.

Week 10 – Final website ready for deployment.

In order to put up a great website, the project requires computer systems that are capable of handling computationally intensive codes. A workspace

is also required in order for the team to communicate with each other and have meetings.

## 6. Potential Project Organization –



This is a potential project organization within DCCM.

Project roles and responsibilities are defined in the group project model and vary from:

- ❖ Steering group

A committee of senior executives in the organization who will review, direct and approve the strategic plans planned by the IT team of the DCCM organization.

- ❖ Reference group

They are a group of individuals in an organization who will influence what type of projects we will purchase and which brands of products we will choose for our organization/web app.

- ❖ Project Receivers

They are the end-users in this project. The end-users will receive the benefits of this application by being able to choose the diagnostic services offered

- ❖ Clients

The diagnostic center is our client. They include lab assistants, receptionists, etc. They will help us schedule the appointments of our customers, generate and mail the reports of the customers.

- ❖ Project manager

They will provide management support, supervision, and oversight for the project, make available staff and other resources as needed to support project development, ensure resolution of problem and concern issues.

❖ Project team

This group will work on the development of the project. Develop and maintain the code, implement code standards, update and report the status of the project. They will implement the following project control mechanisms like:

- Project progress
- Changes to system requirements
- Problem resolution

❖ Project sponsor

They play an important role in an organization. They are concerned with ensuring that the project delivers the agreed business benefits. They do not manage the day to day project operations but ensure that the resources are in place and available to the project team, promote the project, hold responsibility for the project's success.

Team –

1. Preeti Agrawal - 01FB16ECS274
2. Prerana Jayakumar - 01FB16ECS275
3. Priya S Nayak - 01FB16ECS277
4. Rachana Aithal P - 01FB16ECS283
5. Rhiya Ramesh - 01FB16ECS301
6. Rhythm Girdhar - 01FB16ECS302