Synopsis on

Novo Connect

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BTBTC18144

For the award of the degree of

B.Tech (Computer Science)

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SDE II

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Banasthali - 304022

Session: 2021-2022

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1. INTRODUCTION

Novo Connect is a Doctor Consultancy and Ecommerce application. It provides web based as well as mobile based application. Among the various services it provides, first is where user can seek doctor's appointment or consultant's appointment as per the problem being faced. User can have three different means to book an appointment which are:

- Virtual: where user can book an appointment for virtual consultation.
- InPerson:
 - o Doctor visiting patient's location.
 - o Patient can visit doctor's clinic.

For ex: User suffering from skin disease, then it can search specialist in Skin and search will generate a list of consultants who is specialized in skin problems, then user can select consultant and time slot according to availability. User can choose among the three means to book an appointment. After selecting time slot user have to do payment. Second service that Novo Connect provide is where user can buy product as recommended by doctor or consultant. User can search for product, check detail of product and variant and order product as per the requirement. Other services includes organizing events by consultants or doctors revolving around medical awareness which can be registered by user.

Vision: A single platform where user can get consultancy plus medicines suggested by consultant.

Mission: It shall achieve its vision through

- Focus on quality care to user by providing products of different companies and brands, services, providers.
- A guide to find the right services or products for your concerns.
- Conduct useful medical awareness events.

2. ORGANIZATION AND SYSTEM

a. Organization

Essentia is a custom web, cloud, digital, desktop software development and consulting company that provides the digital support and IT solutions to the customers. With Essentia's unique combination of the techiest people, smartest processes and the latest technologies, Essentia go all out of our ways to bring our clientele the best possible digital services in the country and beyond. Since Essentia's founding, Essentia have been deeply committed to coming up with agile web resolutions for leading organizations across a spectrum of industries. Essentia design, architect, develop maintain and scale technical solutions as web or mobile applications.

Vision: Known for providing the best quality services in the most efficient budgets, Essentia believes in creating customer-centric experiences. Essentia is a small group of people who are constantly working towards gearing a better business future for our clientele.

Mission:

- Creating a Community: Essentia are working as a family which isn't just creating the best possible web solutions for its clientele but also bricking up a collaborative community that gives back to the world. Essentia has a group of young hearts who believe in learning the new and improving our skills every day!
- Always being curious: Just like Mr Jobs said, "Stay Hungry, Stay Foolish", Essentia has a curious bunch of people who want to solve even the tiniest of problems. Let's just say, we won't let it go until we fix it!
- Giving what you want: Essentia is extremely particular about our client's specificities. Essentia are here to give face and interface to your visions. So, shoot your suggestions and queries, we are here to hear them all!
- Thinking ahead: Essentia work for the bigger picture that will help companies create a future proof digital presence. With newer trends and upgraded versions, Essentia offer purposeful

online support that will lead to positive changes for your business.

b. Existing System

In business many tasks are completed only after a series of approvals or a certain flow. In the existing system, this was done manually. It includes the manual processes of inputting data or handing off a file to the next person who needs to work on the file, running around, keeping track, making sure all the right people signed in all the right places. Completing these tasks can be very frustrating when done manually, i.e., dealing with paper work that needs to be sent, delivered & signed each step of the flow is time consuming and inefficient.

Healthcare is the most critical aspect of our society, and many health care providers face challenges to offer practical and active services to patients. Considering a multispeciality hospital, many people enter and exit the hospital in a day and maintaining their records safely is tedious. To reduce this type of burdens and to manage the financial, hospital administration and clinical aspects.

c. Proposed System

In Market there are two different kinds of platforms. One support online consultancy with doctors or consultants and other allows to buy medicine. Example of such platform are:

Practo Search - Practo Search is a patient focused, unbiased, independent medical website with over 100,000 doctor profiles from across India and Singapore. Patients can book confirmed appointments with doctors listed on Practo's website.

PharmEasy - Pharmacy made Easy. We are one of the largest pharmacy aggregators in India. We help patients connect with local pharmacy stores and diagnostic centres in order to fulfil their extensive medical needs.

Novo Connect is an attempt to include both services which are doctor consultancy plus online pharmasy. Most often, the consumers are unaware of how they get their medicine and therefore, do not trust the e-pharmacy completely. Novo Connect works towards keeping all of their customers informed and provides a transparent platform so as to provide the best service possible. Novo Connect also provide platform to doctors and consultants to host an event related to medical awareness.

Appointment Booking workflows involve the following activities:

- Register/Login on platform
- Browse to service section
- Book an appointment
 - Choose a Service
 - Choose an appointment type
 - Choose a location offering this service
 - Choose a Provider
 - Selection duration and date according to doctor's availability.
- Select Billing Address
- Made Online Payment

Benefits of Novo Connect

- Consultation with the promised doctor
- Accurate Address- Near or far we will make sure you reach right address.
- Reasonable Wait time.

3. REQUIREMENT ANALYSIS

a. Requirement Specification

Novo Connect is web based application that covers the gap between user and tedious conservative method of appointment booking as well as ease the method of buying medicine. The user will log in to the website with its login credentials and can access and monitor the workflow according to his right. The availability of this website is up to the Internet connection of the client. It is secure, reliable and consistent.

- The user should have proper login credentials.
- Different access rights are provided according to user.

b. H/w and S/w Requirements

• H/w Requirements

➤ Client Side

- HDD : Minimum 4 GB internal Storage
- Good internet connectivity

> Server Side

- Data Centre : AWS Cloud EC2 Instance
- Storage : HDD
- AWS ECS(min 2 vCPU/4GB Memory), AWS RDS(postgres)(1vCPU/4GB Memory)

Developer Side

- Processor : Quad Core 64-bit processor
- RAM : Minimum 8 GB RAM
- Windows SDK : 4 GB
- Ample space for multiple complex projects

• S/w Requirements

> Client Side

• OS : Any GUI OS

 Browser : Any browser compatible with IE 5.0 or onwards

Server Side

OS : Ubuntu 20.04

Framework : Visual Studio Code

■ Back-end : Django

Database Server : PostgreSQL11

Browser: Any browser compatible with IE 5.0 or onwards

Deployment on AWS

> Developer Side

■ OS: Windows 7 & above/ Ubuntu

Framework : Visual Studio Code

■ Front-end: HTML5, CSS3, Vuejs, Nuxt

Back-end : Python 3.7 (Django Framework)

Database : PostgreSQL11

4. FEASIBILITY STUDY

A feasibility study is an analysis that takes all of a project's relevant factors into account including economic, technical and operational considerations to ascertain the likelihood of completing the project successfully. Project managers use feasibility studies to discern the pros and cons of undertaking a project before they invest a lot of time and money into it. It is the initial design phase of the project which is done to find out that the project we are making is feasible or not.

The objective of the feasibility study is to establish the reasons for developing the software that is acceptable to users, adaptable to change and conformable to established standards. Various other objectives of feasibility study are:-

 To analyze whether the software will meet organizational requirements.

- To determine whether the software can be implemented using the current technology and within the specified budget and schedule.
- To determine whether the software can be integrated with other existing software.

However, during system engineering we concentrate our attention to three basic areas of interest.

4.1 Technical Feasibility

Analyst evaluates the technical merits of the system concepts during the technical analysis and at the same time determines additional information related to reliability, maintainability, predictability and performance of the system that has to be developed. In technical feasibility, following questions are to be taken in consideration:

- 1. What are the technologies that are required for the accomplishment of the performance and function of the system?
- 2. What are the new methods, algorithms and process required and what are the risks in their development?
- 3. How will these technology issues affect cost, How the cost will be affected by this technology?

The project's technical feasibility:

This web-based project has been developed using Django framework. It contains a base workspace and an extensible plug-in system for customizing the environment. It has the advantage that it is an open source platform and the developer can inspect and make changes according to the client's requirements. User management and content management is quite easy and provides better user experience. Hence, no overhead incurs while using Django as our mainstream framework in this project. We are using vue.js for frontend.

Vue.js offers simplicity, performance, documentation, faster development, easy upgrades, and much more. Vue.js is a progressive JavaScript framework that is used to build the user interface of modern applications without using a lot of resources. Vue.js mainly focus on the view layer, which enables developers to integrate it into the existing projects without any hassle. Vue.js is a perfect choice for building single-page applications (SPA). The Vue.js framework offers ready-to-use plugins that solve many critical issues in application development. Vue also provides amazing tools and efficient state management and routing options. Vue.js is backed by an active growing community of dedicated. The biggest reason behind choosing Vue.js is due to its less learning curve and support for virtual DOM.

4.2 Economic Feasibility

In the economic feasibility, cost benefit analysis has been and is one of the most important information contained in the feasibility study. It helps us to understand the total cost incurred to develop the project and consider them tangible (measurable directly in dollars). Cost-benefit analysis is complicated by factors that may vary with the characteristics of the system to be developed. In addition, many benefits that are derived from computer-based systems are intangible.

The project's economic feasibility:

- There is little to no cost incurred for the development of this project since most of the tools/technologies used are open source.
- 2. Very less cost is required for the maintenance.
- 3. The system is financially feasible since user pay according to consumption.

4.3 Operational Feasibility

In this, problem solving is measured with the help of a new proposed system. During the development of the project, it helps in taking advantage of the opportunities and fulfils the requirements as identified for the success of the project. Some important questions that are taken in consideration during operational feasibility:

- 1. From the management and user, there is sufficient support or not?
- 2. Users will accept current online method or not?
- 3. Proposed system will cause any harm or not?
- 4. In any case or area, it will provide poor result or not?

The project's operational feasibility:

- There was very good response from top management for development of the project.
- 2. Besides it, no harm could be seen to developers or to other environment while developing the project.
- 3. The website provides smooth graphical interface to the users.

5. WORK PLAN

July

Learning – Complete FreeCodeCamp, vue.js

August

Planning and information gathering

September

Designing and prototyping

October

Trial run implementation, develop small code modules and implement in local host

November

Final implementation and integration

• December

Testing, bugs resolution and reporting

6. REFERENCES

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