

Bridge Boot Camp - Tech

Post Session Exercise – 1

Software (technology) helps to solve the real-world problems.

- Comprehensive report about the www.echanneling.com website

01) **www.echanneling.com** is a Sri Lankan-based online platform that enables patients to book medical appointments with doctors and healthcare professionals. The major problem being solved by echanneling.com is the inconvenience and time-consuming nature of traditional methods of booking medical appointments, such as calling the clinic/hospital or visiting in person.

With echanneling.com, patients can quickly and easily book appointments with their preferred healthcare provider, without the need to physically go to the clinic/hospital or wait on hold on the phone. The platform also allows patients to view the availability of doctors, their qualifications, and fees, making the booking process much more transparent and convenient.

Accordingly, the major problem being solved by echanneling.com is to provide a convenient and efficient way for patients to book medical appointments, saving them time and effort in the process.

02) In addition to this main service, the website also solves other problems such as:

Providing easy access to medical information: Echanneling.com provides a wealth of information on health and wellness, including articles, videos, and other resources that help people better understand their health and make informed decisions.

Streamlining healthcare: By providing online appointment booking and e-prescriptions, Echanneling.com makes it easier for patients to connect with doctors and receive the care they need, without the hassle of waiting in long queues or traveling long distances.

Improving patient-doctor communication: The website allows patients to communicate with their doctors before and after appointments, providing an opportunity to clarify any questions or concerns they may have about their health.

Promoting preventive healthcare: Echanneling.com promotes preventive healthcare by providing access to health screening and testing services, as well as educational resources on healthy lifestyle choices.

Hence, echanneling.com is dedicated to improving healthcare access and quality in Sri Lanka, by leveraging technology to provide patients with a convenient and efficient way to connect with healthcare providers and manage their health.

- 03) As well as Patients can use the website to search for doctors by specialty, location, and other criteria, and then book appointments with those doctors online. They can also view their medical records, receive e-prescriptions, and communicate with their doctors through the website.

Healthcare providers, such as doctors and clinics, can use the website to manage their schedules, appointments, and patient records. They can also use the website to promote their services and connect with new patients.

In addition to patients and healthcare providers, other users of the echanneling.com system include medical laboratories, pharmacies, and insurance companies. Medical laboratories can receive test requests and results through the website, pharmacies can receive e-prescriptions and dispense medication, and insurance companies can verify patient eligibility and process claims.

- 04) Here are some of the benefits that different users can get from using the website:

- **Patients:**

Convenience: Patients can easily book appointments with their preferred doctors online, without having to physically go to a hospital or clinic.

Timesaving: Patients can save time by not having to wait in long queues to see a **doctor**:

Access to a wide range of doctors: Echanneling.com provides access to a large network of doctors in Sri Lanka, making it easy for patients to find the right specialist for their needs.

Easy payment: Patients can pay for their appointments and other services through the website, making it a hassle-free process.

- **Doctors:**

Increased visibility: Doctors can showcase their profiles on the website, making it easier for patients to find and book appointments with them.

More patients: By listing their profiles on echanneling.com, doctors can reach a wider audience, potentially attracting more patients.

Streamlined process: The website provides doctors with a streamlined process for managing their appointments and patient records.

Hospitals and clinics:

Increased visibility: Hospitals and clinics can list their services on the website, making it easier for patients to find and book appointments with them.

Improved efficiency: The website provides a streamlined process for managing appointments and patient records, helping hospitals and clinics to improve their efficiency.

Access to a large network of doctors: Echanneling.com provides access to a large network of doctors in Sri Lanka, which can help hospitals and clinics to attract more patients.

- 05) There are several alternative systems available that offer similar healthcare services to echanneling.com. Here are a few examples:

Doctoroncall: Doctoroncall is a Malaysian-based online healthcare platform that provides video consultations, medication delivery, and appointment booking services. Like echanneling.com, Doctor on Call aims to provide convenient and accessible healthcare services to patients.

Zocdoc: Zocdoc is a US-based platform that allows patients to search for doctors, book appointments, and manage their healthcare records online. It also provides features like reviews and ratings of doctors, and insurance verification.

When comparing echanneling.com to these alternative systems, there are several factors to consider, such as:

Coverage: Echanneling.com focuses on providing healthcare services in Sri Lanka, while the other systems mentioned above are available in different countries.

Services offered: While all these systems offer appointment booking and online consultations, some may offer additional services such as medicine delivery, health information, and insurance verification.

User interface: The ease of use and user interface of each system can differ, which can impact the user experience.

Pricing: The pricing structure of each system can vary, and it is essential to consider the cost of services and any additional fees.

Overall, echanneling.com is an excellent platform that offers convenient and accessible healthcare services to patients in Sri Lanka. When compared to alternative systems, it offers unique features that cater to the Sri Lankan healthcare market. However, patients and healthcare providers may benefit from exploring alternative systems to find the one that best meets their needs.

- 06) To channel a doctor through echanneling.com, users must first create an account and provide some basic information, such as their name, email address, and phone number. They can then search for doctors or healthcare providers by selecting their location and specialty, or by entering specific search terms.

Once they have found a suitable healthcare provider, users can view their profile, read reviews from other patients, and choose an available appointment time. They can also provide any necessary details or information about their medical history or condition to help the healthcare provider prepare for the appointment.

After booking an appointment, users will receive confirmation via email or SMS, as well as any additional instructions or information about the appointment. They can also manage their appointments, view their medical records, and communicate with their healthcare provider through the echanneling.com platform.

In graphical terms, the process of channeling a doctor through echanneling.com can be represented as follows:

- ✓ Create an account and provide basic information.
- ✓ Search for doctors or healthcare providers based on location and specialty.
- ✓ View doctor profiles and read reviews from other patients.

- ✓ Choose an available appointment time and provide necessary information.
- ✓ Receive confirmation of appointment and additional instructions
- ✓ Manage appointments, view medical records, and communicate with healthcare provider through the echanneling.com platform.

07) The process involves several user interfaces that facilitate the workflow. Here is a brief description of each user interface used in the process:

Homepage: The homepage is the first interface that users interact with when they visit the eChanneling.com website. It provides an overview of the services offered by the platform and allows users to search for doctors based on their location, specialization, and availability.

Doctor search interface: This interface allows users to search for doctors based on their location, specialization, and availability. Users can filter the search results to find doctors who meet their requirements.

Doctor profile interface: When a user clicks on a doctor's profile, they are taken to a page that displays the doctor's qualifications, experience, specialization, and availability. Users can also see the doctor's fee and schedule an appointment.

Appointment scheduling interface: This interface allows users to schedule appointments with doctors based on their availability. Users can select the date and time that is convenient for them and provide additional information such as their medical history and reason for the appointment.

Payment interface: After scheduling an appointment, users are taken to a payment interface where they can pay for the consultation using a credit or debit card. The payment interface is secure and ensures the confidentiality of user data.

Video consultation interface: On the day of the appointment, users are taken to a video consultation interface where they can speak with the doctor in real-time. The interface allows users to share their medical history, symptoms, and ask questions to the doctor.

08) Furthermore the echanneling.com website is a web-based software solution, which means that it is accessed through a web browser over the internet. Users do not need to download or install any software on their computers to use the platform. All the functionalities and features of the website are available online, including searching for doctors, scheduling appointments, and conducting video consultations. The website is hosted on a server, and users access it through their web browsers from anywhere in the world with an internet connection. As a web-based software solution, eChanneling.com offers the advantages of easy accessibility, scalability, and low maintenance costs, making it an efficient and convenient platform for patients to connect with doctors online.

09) The database of the eChanneling.com website should store various types of data to support its functionalities and features. Here are some examples of the data that should be stored in the database:

User information: The database should store information about users, including their names, contact details, and login credentials.

Doctor information: The database should store information about the doctors who are registered on the platform, including their names, qualifications, specializations, and availability.

Appointment information: The database should store information about the appointments scheduled by users, including the date and time of the appointment, the doctor's name, and the user's contact details.

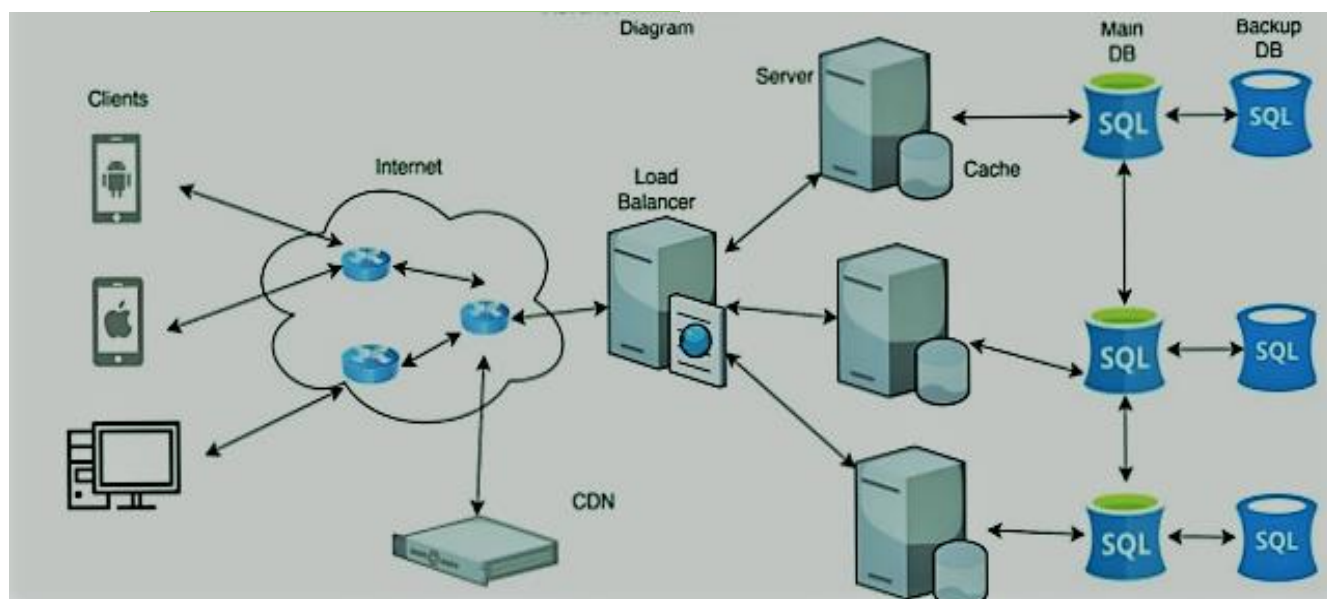
Payment information: The database should store information about the payments made by users, including the amount paid and the payment method used.

Medical history: The database should store information about the medical history of users, including any pre-existing conditions, allergies, and medications they are taking.

Video consultation data: The database should store information about the video consultations conducted between doctors and patients, including the date and time of the consultation and any notes or recommendations provided by the doctor.

Overall, the data stored in the eChanneling.com database should be secure, confidential, and compliant with applicable data protection regulations. The database should also be designed to support efficient data retrieval and analysis to support the platform's functionalities and improve the quality of healthcare services provided to patients.

- 10) The communication flow between the browser, network, server, and database of the echanneling.com website is a complex process that involves multiple technologies, protocols, and devices working together to provide a seamless experience for the user.



Browser: The user accesses the eChanneling.com website through a web browser, such as Google Chrome or Mozilla Firefox. The browser sends a request to the server for the website's content.

Network: The request from the browser travels over the internet through various network devices, such as routers and switches, to reach the server hosting the eChanneling.com website.

Server: The server receives the request from the browser and processes it to generate a response. The server retrieves the necessary data from the database, such as doctor information, appointment schedules, and user details, to generate the response.

Database: The server communicates with the database to retrieve and store data as required by the website's functionalities. The database stores information about users, doctors, appointments, payments, medical history, and video consultations.

- 11) The administrative user of the echanneling.com website plays a critical role in managing the platform's operations, ensuring its security and compliance with regulations, and improving its functionalities to meet the needs of users. Here are three tasks that an administrative user of the echanneling.com website may perform:

User management: The administrative user may have the ability to manage user accounts, including creating, modifying, or deleting them. This functionality can help ensure that only authorized users have access to the platform and that user information is up to date.

Doctor management: The administrative user may have the ability to manage doctor accounts, including verifying their credentials, approving, or rejecting their registration, and updating their information. This functionality can help ensure that only qualified and authorized doctors are registered on the platform.

Reporting and analysis: The administrative user may have access to a range of reporting and analytical tools to monitor the platform's performance, identify issues or trends, and make data-driven decisions. These tools can help the administrative user identify areas for improvement and optimize the platform's functionalities to provide better healthcare services to patients.

- 12) While the echanneling.com website provides a range of functionalities and features to help patients connect with doctors online, there may be some processes and activities that cannot be achieved through the system, and users may need to perform them manually. Here are some examples:

Physical examination: The eChanneling.com website provides a platform for patients to conduct video consultations with doctors. However, in some cases, doctors may need to conduct a physical examination to diagnose and treat patients. In such cases, patients would need to visit a physical medical facility.

Emergency situations: The eChanneling.com website provides a convenient platform for patients to schedule appointments and consult with doctors online. However, in emergency situations, such as severe injuries, heart attacks, or strokes, patients should seek immediate medical attention by calling emergency services or visiting the nearest hospital.

Medication dispensing: The eChanneling.com website allows patients to consult with doctors online and receive medical advice and prescriptions. However, patients may need to visit a pharmacy or a medical facility to obtain their medications physically.

Technical issues: While the eChanneling.com website is designed to be accessible and user-friendly, users may encounter technical issues, such as internet connectivity problems or software glitches, that may require manual intervention or troubleshooting.

- 13) Here are some ways that echanneling.com website can potentially automate the activities that I mentioned earlier:

Physical examination: While echanneling.com website cannot replace a physical examination; it can potentially integrate with wearable medical devices or remote monitoring systems to gather patient data and provide doctors with more comprehensive information about the patient's health. These devices can include blood pressure monitors, glucose meters, pulse oximeters, and ECG monitors. Doctors can use this data to diagnose and treat patients remotely or provide them with appropriate medical advice.

Emergency situations: In the case of emergency situations, echanneling.com website can provide patients with a quick and easy way to locate and contact emergency services in their area. The website can also integrate with telemedicine services that provide on-demand medical consultations and advice to patients in emergency situations.

Medication dispensing: echanneling.com website can potentially integrate with online pharmacies to provide patients with the ability to order and receive their medications online. The website can also integrate with automated dispensing machines that can provide patients with their medications on-site.

Technical issues: echanneling.com website can provide users with access to online support services that can assist them in troubleshooting technical issues that they may encounter while using the website. These services can include online chatbots, video tutorials, and user forums.

Overall, echanneling.com website can potentially automate many of the activities that were traditionally performed manually by integrating with other technologies and services to provide patients with more comprehensive and convenient healthcare services.

Thank you.

[Student name:- Mahagodage Piyumika Nuwandini (4691)]

