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A Project Proposal
on
“E-Doko”

“COMP 206”

(For partial fulfillment of II Year/ I Semester in Computer Engineering)

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Abstract

Time is the most valuable asset one has in this world that is changing and moving so quickly. We are therefore creating an online platform that will enable us to minimize the time spent during the buying and selling of goods that will help us speed up the process of day to day activities and help maximize the time for what's most important. This website is being created from the ground up using **HTML, CSS, JavaScript, ReactJS, NodeJS, and MongoDB**. **"E-Doko"**, a versatile platform for both buying and selling goods. Depending on one's needs, one can choose to be either a buyer or a seller. The platform will be able to support itself through potential revenue from advertisements, client service fees, and tax benefits offered by the government for promoting **"Made In Nepal"** goods.

Keywords: *HTML, CSS, JavaScript, ReactJS, NodeJS, MongoDB*

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Acronyms/Abbreviations

HTML-Hyper Text Markup Language

CSS-Cascading Style Sheet

Introduction

1.1 Background

Since the early times people has always seek a convenient, safe and easy life. With the advancement in science and technology, the necessities being the same, the mode of achieving it has been changing frequently for a period of time. In the era, where time is considered as the most fundamental asset, people try to save time effectively as much as possible. When the topic comes to shopping, there is always a serious discussion on time complexity. In order to sum up all these things, we are trying to develop an E-commerce web application **E-DOKO**.

E-DOKO is designed in such a way that one can buy and sell the products virtually getting the required information about specific products despite having distance of thousands of kilometers between buyer and seller. One cannot extract the exact details of the certain products through one meeting. E-DOKO will provide details about the necessary details of the products in just one click. In addition to this, we will have a login system where we have an option of buy/sell. These two have different portals where buy one includes the list of products and sell portal have the option to upload the product details.

Our web application is designed especially to the people who are specially-abled people and other who cannot invest much of their time shopping and bargaining with the shopkeepers. Even the local shopkeepers can add up the details to the web and can get costumers globally. Although, there are several E-commerce web applications like Daraz, amazon and others, they don't promote "Made In Nepal" products. Our main target will be to promote the Nepali products along with the international brands. Our website is free for the users and even the people with low investment can also sell their products through it. The existing sites and apps related to E-commerce are very popular but we don't see the local products uploaded for sell. It may be because we should pay for selling our products or the number of buyers who know about local products are

low. So, E-DOKO website will focus on promoting the local products and encourage people on using the local products. The buying and selling transactions are only kept secret within the buyer and seller so others won't know about this transaction which is also a good feature of this website and the products that are sold out will be removed from the database.

1.2 Objectives

The main objective of the project is:

- To develop a web for buying and selling goods
- To provide a versatile platform for both sellers and buyers as per their needs.
- To prepare immense knowledge about web development while being familiar with HTML, CSS and JavaScript.

1.3 Motivation and Significance

The idea behind developing 'E-DOKO' is to enhance our skills and knowledge on developing web through HTML, CSS, JavaScript, ReactJS, NodeJS and MongoDB. On addition to this, we will learn to work in group, and develop collaboration among team members including time management.

Similarly, the project provides us with a platform to buy and sell products. With the help of the project, one can add up the list of products that they want to sell and also buyers can get details about the products saving a lot of time. The valuable information like durability, warranty and specifications about products can be easily accessed through 'E-DOKO'.

1.4 Expected Outcomes

The project will be log-in-based, inclusive and an accomplished version of E-commerce promoting “Made in Nepal” products capable of working as platform for both buyers and sellers |

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Related Works/ Existing Works

There are lots of web similar to **E-DOKO** which acts as a platform for buying and selling the goods online.

Daraz.com is a popular E-Commerce website in south asia developed by Alibaba Group that prioritizes in buying and selling products from and to different individuals repectively. The primary purpose of the website is to provide detailed information about the product that is either being bought or sold. Other than E-Commerce daraz company is also involved in logistics,payment structure and financial services.It’s end to end E-Commerce facility minimizes the involvement of the third party and makes this app as one of the most effective app in our country.

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Amazon.com is another popular website popular all over the world with international market developed by Amazon Cooperation. It has features similar to that of other E-commerce websites but with vast number of users.It is very popular across globe because of it’s excellent search and query features,recommendations based on past buy and reviews and ratings of many people.The market of amazon is very big and it also provides end to end E-commerce service to it’s users.

HamroBazar is another popular E-Commerce website in Nepal which facilitates many people and it too has the features of buying and selling the goods.The HamroBazar is

absolutely free online platform that allows people to upload their goods and items for buying and selling. The photo of item is uploaded along with its description, price and contact number of the user and buyer can get in contact with the seller for buying the item. As this website is end to end the chance of fraud and risks are minimum.

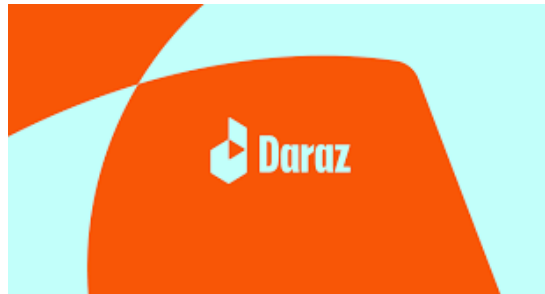


Fig 2.1: Daraz web application



Fig 2.2: amazon web application



Fig 2.3: Hamrobazar web application

Procedure and Methods

The initial structuring and hands-play will be done using HTML,CSS and JavaScript. Later, it will be shifted to ReactJS, NodeJS and will be a full blown web platform for E-commerce. HTML will be used for Structural propose, CSS for visual effects and modifications and JavaScript for Behavioral effects.



Fig 3.1: Elements of web application

System Requirement Specifications

1.5 Software Specifications

1.5.1 Front End Tools:

- Any kinds of text editor like Visual Studio Code, Visual Studio, Scite
- ReactJS

A ReactJS is a free open-source JavaScript library which is primarily built to add the design and UI interfaces in the applications. It is used to build single page application and the UI components in the ReactJS can be reusable. It was first developed by Facebook (now named as Meta) and was used to build Instagram as well.

- Cascading Style Sheet (CSS)

CSS (“MDN, 2022”) is a style sheet language which is used for describing the presentation of documents written in HTML or XML. It was developed by World Wide Web Consortium (W3C) .It is use to add the styles such as fonts, colors, width, margin, padding in the web documents

- HTML

Hypertext Markup Language is the standard language that is used by all websites for the front-end display. It contains all the elements to present the website in the readable manner to the users and is assisted by CSS and JavaScript to make it look better

1.5.2 Back End Tools

- MongoDB

A MongoDB is an open-source, cross platform and document-oriented database management system which stores the data. It stores the data in JSON like documents which makes it easy to retrieve and store the information in the database. It is a very popular Database system and is also known as NoSQL database. The MongoDB was written in C++ and was developed by MongoDB Inc. It is powerful, faster and it is widely used because it can be used to store data in cloud called as MongoDB Atlas for free.

- NodeJS

NodeJS is an open-source, cross platform and Back-end JavaScript runtime environment which runs on the V8 engine and helps to run the code outside the browser as well. The JavaScript helps to write the logic for our code and what NodeJS does is it lets the user run this code in the server side as well. The JavaScript runs only on the browser but the NodeJS runs on the browser as well as outside the browser as well.

- Express

Express is a popular back-end framework used in NodeJS which helps us to simplify the code and make the code effective. It is the server-side programming framework used for building mobile applications and websites. It is possible to use NodeJS alone but what Express helps to make the code smaller which increases the effectiveness and simplicity of the code.

1.6 Hardware Specifications

E-DOKO is a web application so any kinds of sophisticated hardware requirement is not needed. To access this website application, one needs any kind modern PC which is capable of running browsers with a good internet connection which can run this application efficiently.

Project Planning and Scheduling

We have divided our project into nine segments. In the first two weeks, we will explore about the problem and gather essential information with proper research on the project. On the next two weeks, we will analyze the problem followed by designing the next two weeks. On the remaining weeks, we will dedicate ourselves on developing web application.

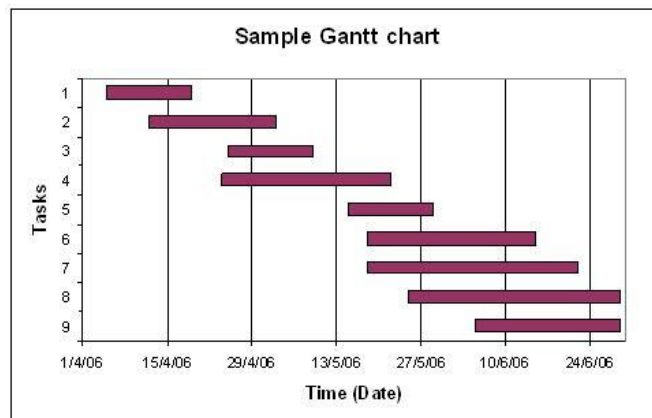


Figure 0.1 Sample Gantt chart

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