

PROJECT SYNOPSIS OF FULL-STACK-2 PROJECT
BACHELOR OF TECHNOLOGY
Computer Science

Title Of The Project: - HelloTech

Project Group Members:-

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Problem Statement

Retail revenue from consumer electronics/technology sales in the U.S. is projected to top \$350 billion in 2018. If you're like most businesses in this fast-growing and highly competitive market segment, you're looking for an edge to capture the largest possible share of this revenue. That edge is ecommerce excellence.

If you expect to grow your business this year, you need to give customers an exceptional online shopping experience.

Objectives Of The Project

Technology and electronics brands compete with the big players – like Apple and Dell – as well as well-known disrupters like Fit Bit. Beyond the challenging competitors, there are ever-changing product innovations in this industry and the ecommerce industry itself is constantly evolving.

The best technology and electronics sites are poised to cash-in on this \$350 million industry, giving consumers the online shopping experience they're looking for.

Here are some main objectives of our HelloTech Project.:

- Clean, crisp design
- Striking visuals
- Comprehensive product information
- Content marketing elements
- Customer reviews

Methodology

How we work

Our methodology is designed to help you take maximum advantage of the internet technologies. It incorporate all aspects related to your website and allows us to ensure that the final product is of the highest standards. Below are the steps we will take to ensure that all your deliverables are completed in time.

1. Requirements analysis

The first step for us is to analyze ecommerce related user requirements. What will be the purpose of their visit to our website, what is the primary goal of our website, how can our team best cater to their fitness related ideas. Many such questions are analyzed for the Needs Analysis stage.

We will analyze our online target audience and assess our differentiation strategy to best attract our visitors.

2. Formulate digital strategy

Based on the analysis, we will determine the factors that will best serve our website. We look at the trends in the market to ensure that we have the well-known technology, components and elements.

3. Web-page conceptualization

We consider this stage to be one of the most crucial factors in any project. We will justify every single aspect of the design to ensure that each element is serving a specific need and the website is truly designed to attract, retain and enhance the end user-experience.

Many thought processes and brainstorming will go into this process to create a design that is serving your existing needs as well as is sustainable with the future growth.

The finalized concepts or templates will then be used to give you an understanding of how internal content intensive pages will look.

4. Web Development

Once we have received concrete idea of the detailed design, we proceed to the development phase. In development phase we will use MERN stack.

Team contribution

The total strength of our team is 4. Name of team members are Mukund Agrawal, Mukul Agrawal Krishna Gupta and Vishal Singh. We will divide our project task according to our technologies used. We

all will design the web-page layout. We all will find the content of the website. We will use brainstorming technique to make our website attractive and user friendly.

Online GIT repository

GIT

GIT is a distributed version-control system for tracking changes in source code during software development. It is designed for coordinating work among programmers, but it can be used to track changes in any set of files. Its goals include speed, data integrity, and support for distributed, non-linear workflows.

GIT Repository

When multiple developers commit code with git, GitHub becomes a central repository where all the code that everyone's working on can stay in sync. You'll commit your changes, and other developers will pull them

For our Project, we have created an Online GIT repository and mentioned important information regarding important dates and meeting with guide for the project.

Our Git repository name is Fitness-Treat.

Git repository link <https://github.com/Mukul-agrawal/HelloTech>

Hardware & Software used

Hardware-requirement –

- Processor: i3 or above
- RAM: 4 GB or above
- Disc space: 20 GB

Software-requirement-

Git package

The github package brings Git and GitHub integration right inside Visual Stdio Code.

Visual Studio Code

Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDEs, such as Visual Studio IDE.

Technologies-

MERN Stack: MERN Stack is a JavaScript Stack that is used for easier and faster deployment of full-stack web applications. MERN Stack comprises of 4 technologies namely: MongoDB, Express, React and Node.js. It is designed to make the development process smoother and easier.

Each of these 4 powerful technologies provides an end-to-end framework for the developers to work in and each of these technologies play a big part in the development of web applications.

- **MongoDB** - MongoDB is a NoSQL database where each record is a document comprising of key-value pairs that are similar to JSON (JavaScript Object Notation) objects. MongoDB is flexible and allows its users to create schema, databases, tables, etc. Documents that are identifiable by a primary key make up the basic unit of MongoDB. Once MongoDB is installed, users can make use of Mongo shell as well. Mongo shell provides a JavaScript interface through which the users can interact and carry out operations (eg: querying, updating records, deleting records).
- **Express** - Express is a Node.js framework. Rather than writing the code using Node.js and creating loads of Node modules, Express makes it simpler and easier to write the back-end code. Express helps in designing great web applications and APIs. Express supports many middlewares which makes the code shorter and easier to write.
- **React** - React is a JavaScript library that is used for building user interfaces. React is used for the development of single-page applications and mobile applications because of its ability to handle rapidly changing data. React allows users to code in JavaScript and create UI components.
- **Node.js** - Node.js provides a JavaScript Environment which allows the user to run their code on the server (outside the browser). Node pack manager i.e. npm allows the user to choose from thousands of free packages (node modules) to download.

Limitations of the system proposed

Typeface Limitations -

Basic aspects of website design, the typeface selection for the text of the site, is one of its limiting design features. Not every computer has the ability to display every font, and if the font you've chosen for your site is not available for the viewer, an alternative will be displayed instead. This substitution can cause distortions to appear in the viewer's version, with misaligned text -- or just a subtly different set of visual characteristics -- that can throw off the entire look of the site.

Internet Limitations -

Website designers still have to consider the physical limitations of network access when creating their websites. A fully interactive and animated website can create a stunning impact on the viewer, but the

bandwidth required to download the site can overwhelm some slower connections, making the site all but useless to a percentage of the possible visitors.

Browser Support –

Unfortunately, we do not all use one version of a browser because we are given a choice. This means it is hard e to make sure that our web app is supported across various browsers and for various screen size.

Conclusion

With the increasing adoption rate of internet and a large number of online shoppers, e-commerce has witnessed a steady growth. E-commerce is expected to become the future of retail, with most of the growth in retail sector taking place in the digital space. The global retail e-commerce sales was 1.86 trillion US dollars in 2016 and is expected to reach 4.48 trillion US dollars in 2021. E-commerce sector is undergoing a major technological disruption. As the lifestyle of the consumers is changing and becoming more adaptive to online shopping, it is becoming crucial for the players in this industry to leverage technology to provide services that can lead to customer delight.

References –

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2. <https://www.w3schools.com/>
3. <https://developer.mozilla.org/en-US/>
4. <https://www.youtube.com/>
5. <https://reactjs.org/tutorial/tutorial.html>