HM Basnyat

Individual Project

CISC 4900

Section: VC1C with Professor Lapid

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Basnyat Brew Web Application Project Report

Executive Summary:

Basnyat Brew is a digital platform designed to transform the coffee market in Nepal by introducing a sophisticated online service that offers unparalleled access to premium coffees and authentic Nepali blends. This project aimed to fill the gap left by the absence of international coffee franchises like Starbucks and Dunkin' in Nepal.

Introduction:

Background:

Inspired by the growing coffee culture in Nepal and the lack of major international coffee franchises, Basnyat Brew was conceived as a digital solution to offer premium coffee experiences directly to Nepali consumers.

Objective:

To develop a fully functional and responsive web application that enables users to browse, customize, and purchase coffee and related products conveniently online.

Project Scope:

Web Development: The project involved creating a responsive web application from scratch, including front-end and backend development, UI/UX design, and database management.

Features:

Key features include a user-friendly interface, product customization options, secure payment processing, and an intuitive shopping cart and checkout process.

Technology Stack:

Frontend: HTML, CSS, SCSS, JavaScript

Backend: Django, Python

Database: MySQL

Tools: Figma for UI/UX design, Git for version control, XAMPP

Implementation:

UI/UX Design:

Used Figma to design an intuitive and aesthetically pleasing user interface that reflects the premium nature of the products.

Frontend Development:

Implemented using HTML, CSS, SCSS, and JavaScript to ensure a responsive and dynamic user experience.

Backend Development:

Leveraged Django, a high-level Python web framework, to handle server-side logic efficiently. Python's powerful scripting capabilities were integral for writing clean, maintainable code that manages everything from user authentication to real-time data processing.

Database Integration:

Configured MySQL to manage user data, product information, and transaction details efficiently.

Challenges and Solutions:

Dynamic Backend: Faced challenges in managing real-time updates efficiently. Utilized Django to enhance backend capabilities, which improved data handling and user interactions.

Complex Cart Logic: Implemented advanced JavaScript logic to handle various user-driven customizations and ensure accurate pricing and totals in the shopping cart.

Achievements:

Functional Web Application: Successfully launched a fully operational web platform that has significantly improved access to premium coffee in Nepal.

Enhanced User Experience: The intuitive design and responsive functionality have led to positive user feedback and increased engagement.

Future Work:

Feature Expansion: Plans to introduce additional customization options and expand the product range.

Market Expansion: Aims to extend the reach of Basnyat Brew to additional markets and rural areas in Nepal.

Conclusion:

The Basnyat Brew project has not only achieved its initial goals but has also set a foundation for future growth and innovation in the online coffee marketplace in Nepal. The successful completion of this project marks a significant milestone in my journey as a web developer and entrepreneur.

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