Educational WEB Application

Task Report

Submitted By

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1. Introduction

This document outlines the design and development process for given two tasks:

- **Task 1:** A responsive website designed using Figma.
- **Task 2:** A fully functional, responsive education website developed using HTML, CSS, JavaScript, jQuery, and PHP/MySQL for contact form data handling.

Each task is approached with attention to best practices in UI/UX design and web development, ensuring the final product is visually appealing, functional, and scalable

2. Task 1: Design of a Responsive Website (Figma)

2.1. Project Overview

The first task was to design a responsive website using Figma, an industry-standard UI/UX design tool. The goal was to create a modern, user-friendly interface that adjusts seamlessly to different screen sizes.

2.2. Design Process

1. **Wireframing**: Started with basic wireframes to outline the structure and flow of the website
2. **Prototyping:** Developed mid-fidelity prototypes, adding interaction points for different user scenarios.
3. **Responsive Design:** Ensured the layout adapts for mobile, tablet, and desktop views.
4. **Color Schemes and Typography:** Selected colors and fonts that reflect a professional and cohesive brand image.

2.3. Key Design Features

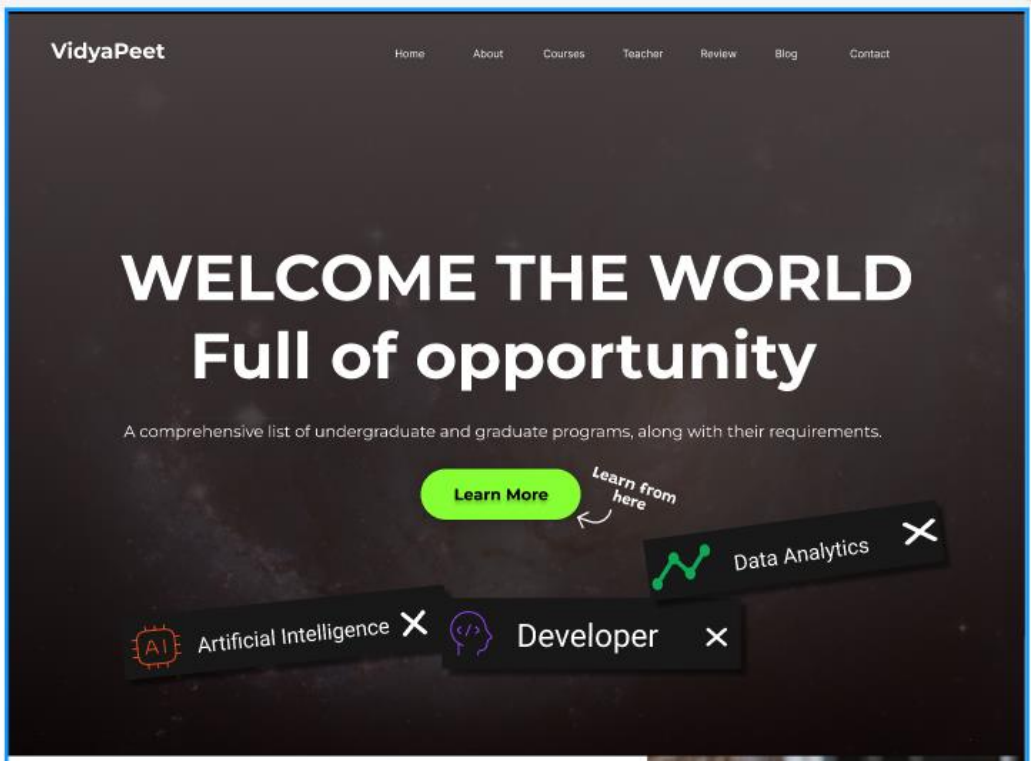
- **Responsive Grid Layouts:** Designed using a flexible grid system
- **Minimalistic UI:** Focused on user accessibility and ease of navigation
- **Interactive Components:** Hover effects, buttons, and forms designed for interactivity.

2.4. User Interface and User Experience (UI/UX)

- **UI Design**: Focused on a clean, modern, and intuitive design language.
- **UX Research:** Based on user personas, the design prioritizes ease of use across all devices

2.5. Screens and Layouts

- Homepage
- About Page
- Contact Page
- Services/Product Page
- Mobile and Tablet Layouts



3. Task 2: Development of a Responsive Education Website

3.1 Project Overview

For the second task, a responsive education website was developed using modern web development technologies. The site includes dynamic contact form functionality using PHP and MySQL to fetch and store user input.

3.2. Technology Stack

- **Frontend:** HTML5, CSS3, JavaScript (with jQuery)
- **Backend:** PHP
- **Database:** MySQL
- **Version Control:** Git
- **Tools:** Code editor (e.g., VS Code), browser dev tools

3.3. Features and Functionalities

- **Responsive Design:** Adjusts to various screen sizes (mobile, tablet, desktop).
- **Interactive UI Components:** Dropdowns, sliders, and modals using jQuery.
- **Contact Form:** Allows users to submit inquiries, with data sent to the backend.
- **PHP & MySQL Integration:** User data is stored in a MySQL database through PHP.
- **Form Validation:** Front-end and back-end validation to ensure data integrity.

3.4. Code Structure

- **HTML:** Structured to follow semantic HTML5 tags for SEO and accessibility.
- **CSS:** Organized using a mobile-first approach, leveraging media queries.
- **JS/jQuery:** Focus on DOM manipulation, event handling, and animations.
- **PHP:** Used to handle server-side processing and MySQL queries.
- **MySQL Database:** Table structure for storing contact form submissions.

3.5. Responsive Design Techniques

1. **CSS Grid/Flexbox**: Used for layout management to create flexible, responsive designs.
2. **Media Queries:** Applied to adjust font sizes, margins, and layout elements across devices.
3. **Mobile-First Approach:** Designed for mobile-first and progressively enhanced for larger screens.

3.6 Database Integration (PHP & MySQL)

- **From Handling:** The contact form captures user data (e.g., name, email, message).
- **PHP Logic:** Processes form data, connects to the MySQL database, and stores submissions.
- **Database Design:** Simple table structure with fields for storing contact form data.

3.7 Testing and Optimization

- **Cross-Browser Compatibility:** Tested on Chrome, Firefox, Safari, and Edge.
- **Performance Optimization:** Minified CSS/JS files, optimized images for faster load times.
- **Validation:** Ensured form validation works on both client and server sides

3.8. Conclusion

The final website meets all project requirements, offering a responsive and interactive user experience. It demonstrates expertise in both frontend and backend technologies, successfully integrating form submission and database handling through PHP and MySQL.

4. Appendices

Source Code:

https://github.com/deepak-jadhav1/Alliance-University-Website-Design

Figma: