Web Agency

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ABSTRACT

A web agency is a professional service provider that focuses on creating, managing, and optimizing websites to help businesses establish and maintain a strong online presence. They specialize in various aspects of web development, including designing visually appealing layouts, ensuring smooth functionality, and crafting user-friendly interfaces. Their primary goal is to deliver websites that not only look great but also perform efficiently, meeting the unique needs and goals of businesses. Web agencies work closely with their clients to understand their target audience, brand identity, and objectives, such as increasing brand awareness, driving more sales, or enhancing customer engagement. They use advanced technologies like artificial intelligence (AI) to improve website functionality and personalization, employ search engine optimization (SEO) techniques to boost online visibility, and enhance e-commerce platforms to provide seamless online shopping experiences. As the digital landscape evolves, web agencies continue to expand their offerings by venturing into complementary fields like digital marketing and custom app development. This diversification allows them to provide integrated solutions, making them a one-stop shop for businesses seeking to succeed in the competitive online market. In essence, web agencies are vital partners for businesses looking to thrive in the digital era, delivering innovative, scalable, and results-driven solutions that foster growth and long-term success.

1-INTRODUCTION

Web agency is an organization that is involved in offering a set of services which are directed towards web site planning, development, promotion, and optimization of the presence of a company or a private person on the Internet. These are firms who provide advice on specific areas such as website creation, web programming, internet marketing, among others to enable the clients attain their online strategies.

One of the most renowned web agencies, focused on creating beautiful and engaging web sites with a perfect balance of design and usability.

The scope of web agency encompasses a wide range of services related to the design, development, and management of websites and digital marketing. They also offer branding, analytics, and technical support services to help businesses succeed online.

It helps to develop a user-friendly interface for clients to easily manage and update their websites.

2-FUNCTIONAL REQUIREMENTS

The Web Agency is web application that creates and manages webpages to boost online presence. It consists of login credentials.

The Web Agency consists the following modules:

1. User Module
2. Developer Module

User Module:

User is responsible for registering and to login to redirect to the main page.

- Register
- Login

- Assign tasks

- View Response

Developer Module:

- Login

- View tasks

- Send Payment details

Non - Functional Requirements

• **Security :** Maintain the security and integrity of the client's information.

• **Usability :** User-friendly website and project management tools.

• **Portability :** Code and design, which is easily transferable from one platform to another.

• **Maintainability :** Simplicity of coding and the ease of updating the content displayed on the website.

Life Cycle Model

We use waterfall model for software development process which has various phases in it.

The sequential phases in Waterfall model are –

Requirements: The first phase involves gathering requirements from stakeholders and analyzing them to understand the scope and objectives of the project.

Design: Once the requirements are understood, the design phase begins. This involves creating a detailed design document that outlines the software architecture, user interface, and system components.

Development: The Development phase include implementation involves coding the software based on the design specifications. This phase also includes unit testing to ensure that each component of the software is working as expected.

Testing: In the testing phase, the software is tested as a whole to ensure that it meets the requirements and is free from defects.

Deployment: Once the software has been tested and approved, it is deployed to the production environment.

Maintenance: The final phase of the Waterfall Model is maintenance, which involves fixing any issues that arise after the software has been deployed and ensuring that it continues to meet the requirements over time.

3-DESIGN

Architectures

Project architecture shows the components used in a project and how requests are processed through them in order. It is a formal way to describe and understand the structure of a system.

There are two types of architecture:

- **Software Architecture**: Focuses on the design of the software system, including its modules and their interactions.

- **Technical Architecture**: Focuses on the technology, infrastructure, and tools used to support the software.
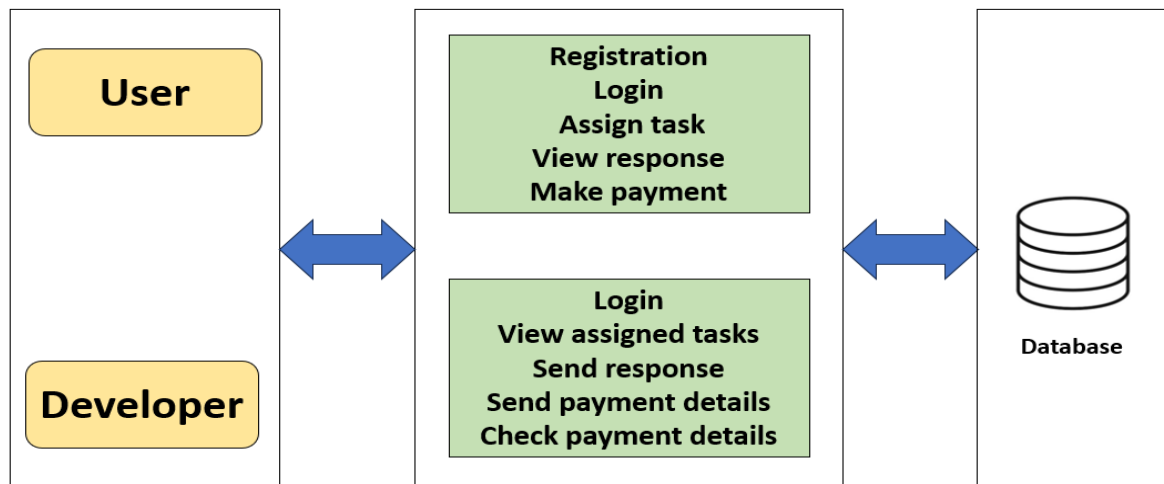
Software Architecture
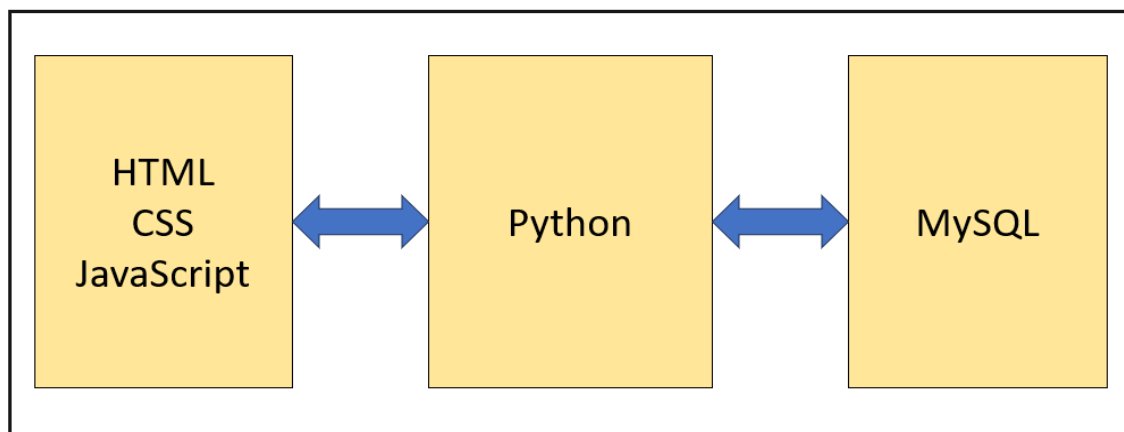

Fig 3.1 Software architecture

Technical Architecture

Fig 3.2 Technical architecture

4- IMPLEMENTATION

Technologies

JavaScript is a popular programming language used to make websites interactive and dynamic. While HTML provides the structure of a webpage and CSS handles its design, JavaScript adds functionality, allowing users to interact with the site. For example, it enables features like dropdown menus, slideshows, form validation, and real-time updates without reloading the page. JavaScript runs directly in web browsers, making it fast and efficient. It's also used for building web applications, mobile apps, and even server-side programs with tools like Node.js.

JavaScript can also be used on the server side with the help of technologies like Node.js, allowing developers to build entire applications with just one programming language. It supports asynchronous programming, enabling tasks like fetching data from servers or APIs in the background without interrupting the user's experience.

Overall, JavaScript is essential for creating modern websites and applications. Its ability to add interactivity, improve user experience, and integrate with other technologies has made it a

cornerstone of web development, shaping how we interact with digital content today.

5-TESTING

Integration Testing

Integration testing allows individuals the opportunity to combine all of the units within a program and test them as a group. This testing level is designed to find interface defects between the modules/functions. This is particularly beneficial because it determines how efficiently the units are running together. Keep in mind that no matter how efficiently each unit is running, if they properly integrated, it will affect the functionality of the software program. In order to run these types of tests, individuals can make use of various testing methods, but the specific method that will be used to get the job done will depend greatly on the way in which the units are defined.

System Testing

System testing is the first level in which the complete application is tested as a whole. The goal at this level is to evaluate whether the system has complied with all of the outlined requirements and to see that it meets Quality Standards. System testing is undertaken by independent testers who haven't played a role in developing the program. This testing is performed in an environment that closely mirrors production. System Testing is very important because it verifies that the application meets the technical, functional, and business requirements that were set by the customer.
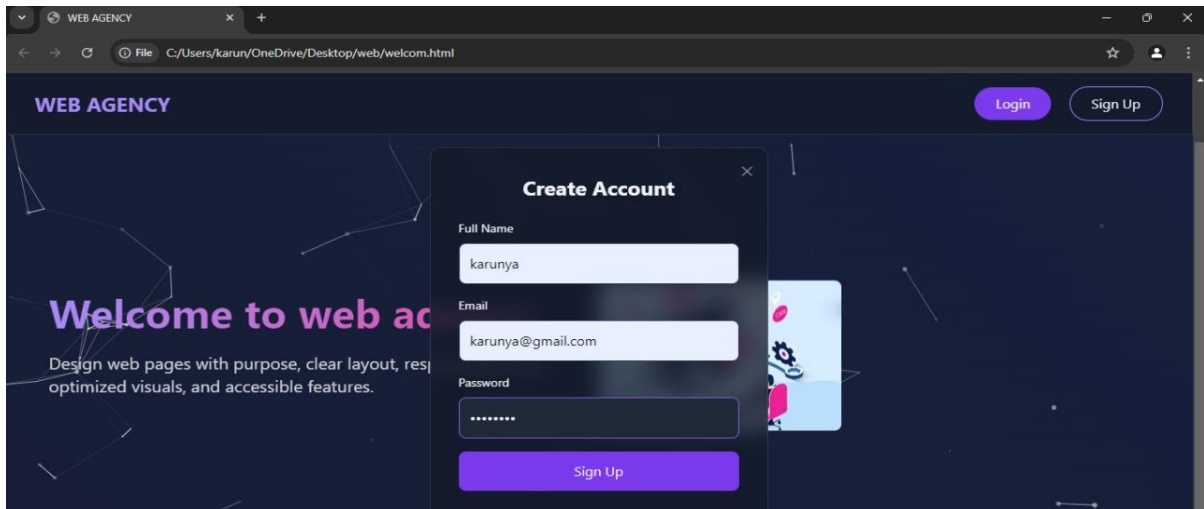
Acceptance Testing

The final level, Acceptance testing (or User Acceptance Testing), is conducted to determine whether the system is ready for release. During the Software development life cycle, requirements changes can sometimes be misinterpreted in a fashion that does not meet the intended needs of the users. During this final phase, the user will test the system to find out whether the application meets their business needs. Once this process has been completed and the software has passed, the program will then be delivered to production. The extensiveness of these tests is just another reason why bringing software testers in early is important. When a program is more thoroughly tested, a greater number of bugs will be detected; this ultimately results in higher quality software.
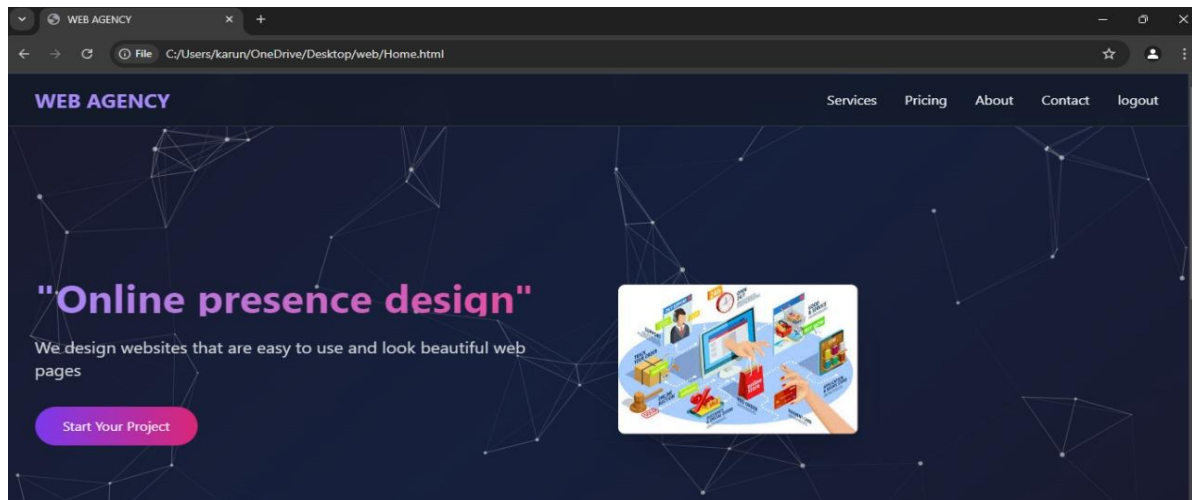
6-SCREENSHOTS
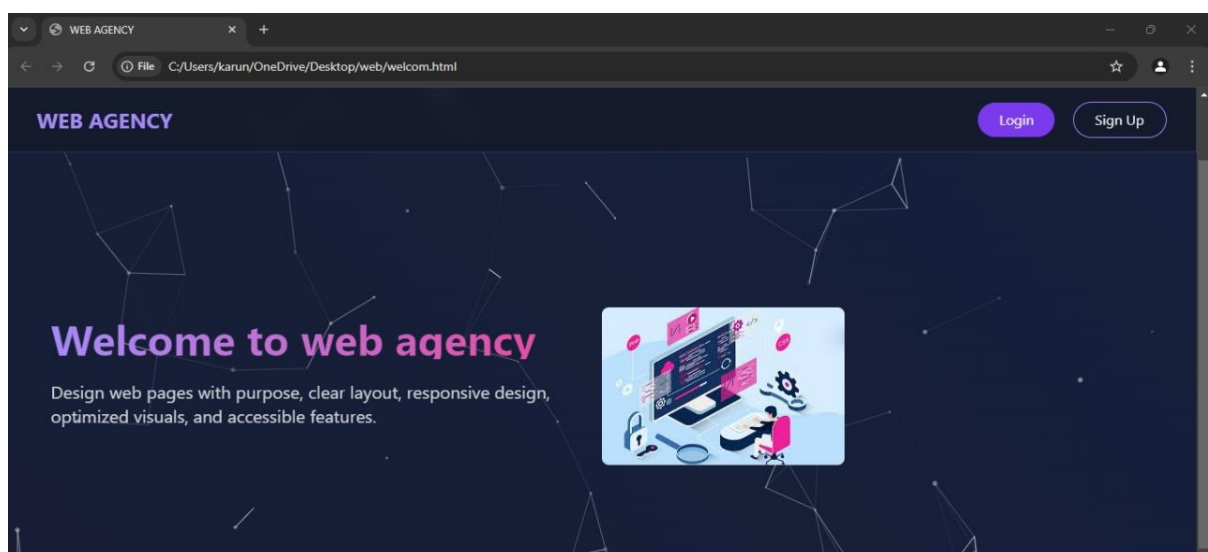
Screenshot 1 Welcome page

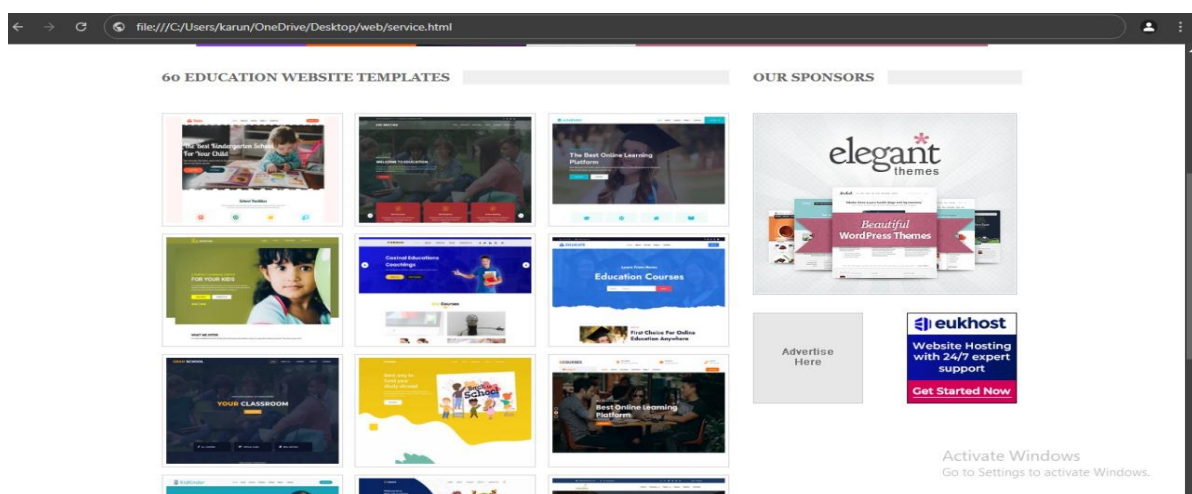Screenshot 2 Main Page

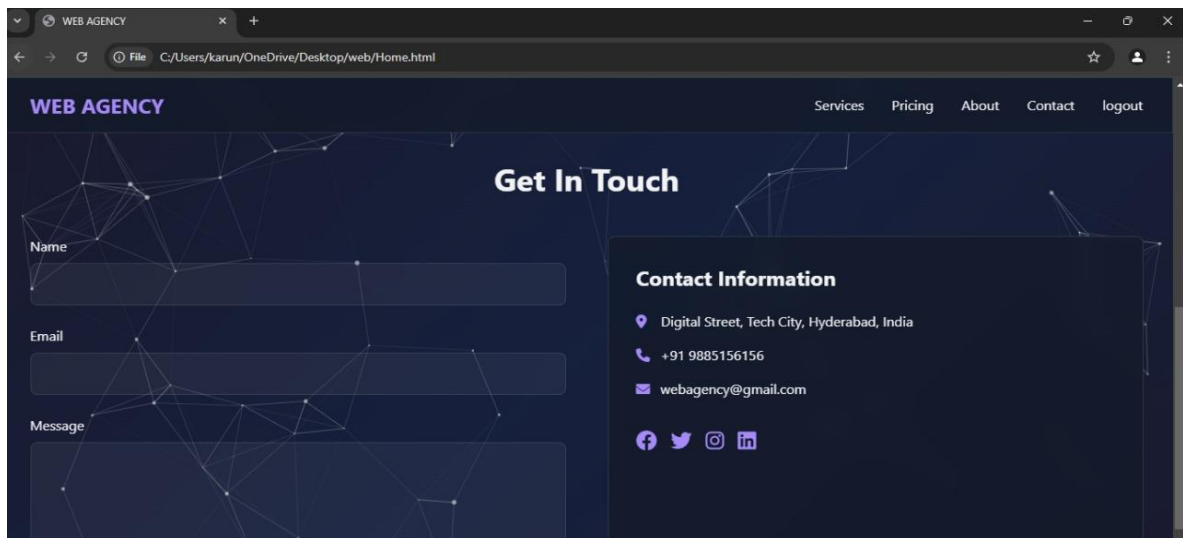Screenshot 3 Home Page

Screenshot 4 Contact page
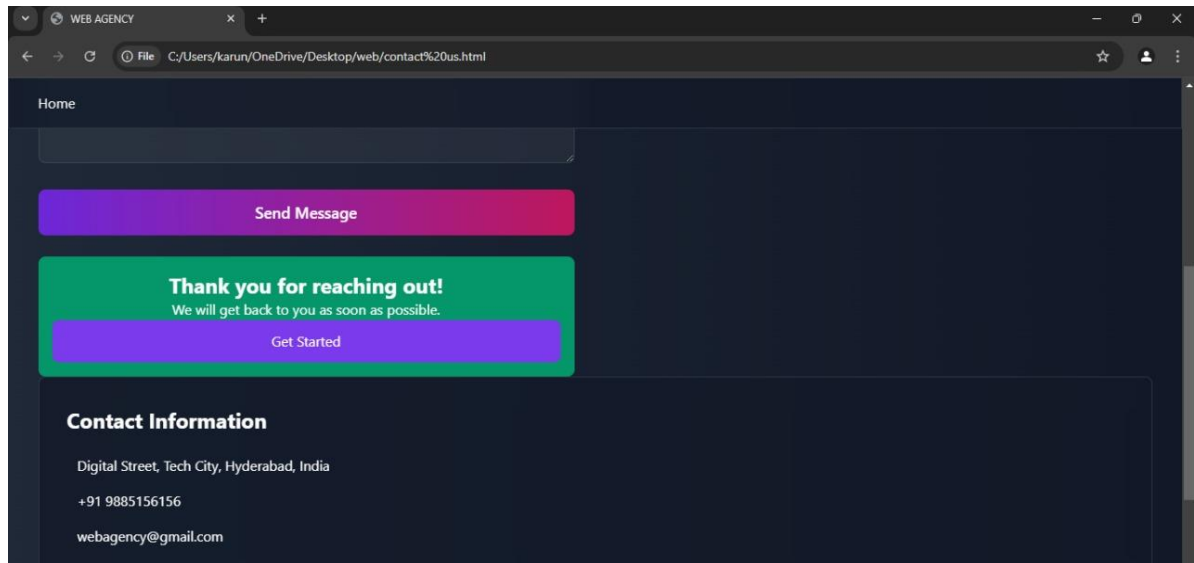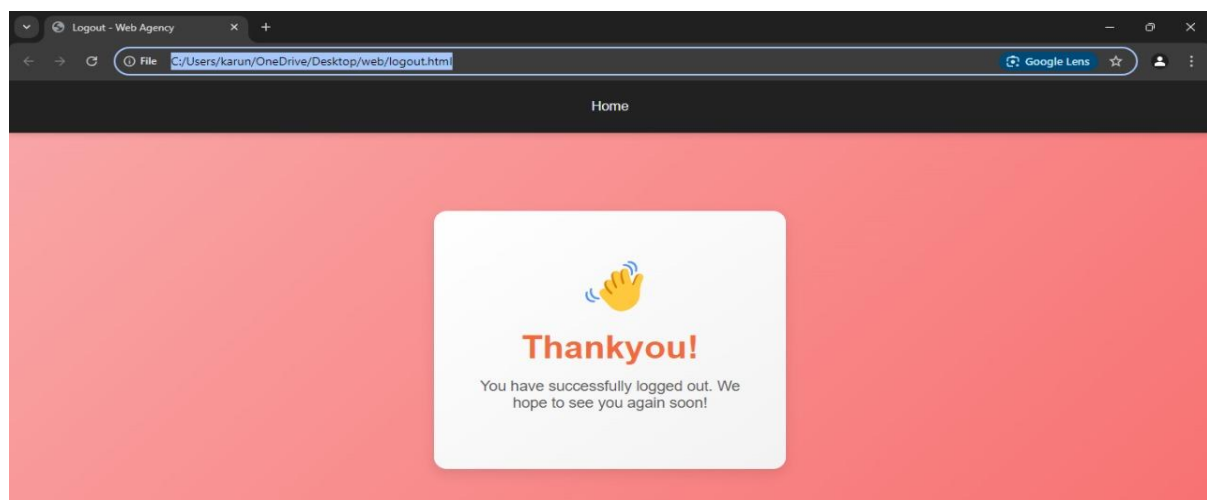
Screenshot 5 Submit page
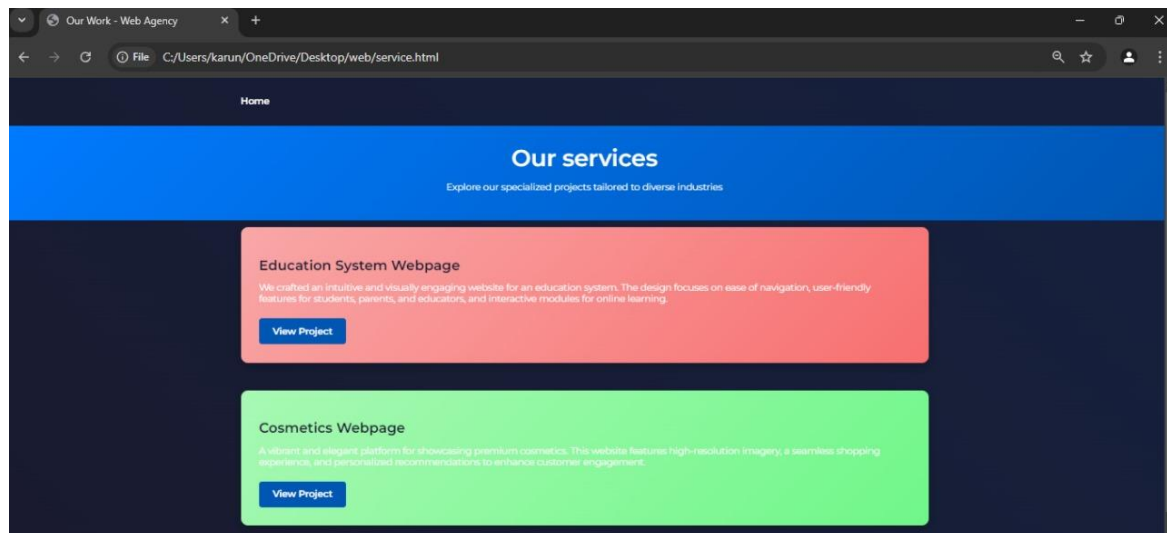
Screenshot 6 Services page

Screenshot 7 Education page

Screenshot 8 Contact page

Screenshot 9 Logout page

7-Conclusion & Future Scope

A web agency is a team of experts that helps businesses build and maintain a strong online presence. It takes care of everything needed to create a professional, user-friendly website that looks appealing and functions smoothly. This includes designing the overall look of the website, ensuring it works well on different devices, and creating a seamless experience for visitors.

The main purpose of a web agency is to help businesses achieve their online goals. Whether it's increasing brand awareness, driving more sales, connecting with customers, or providing valuable information, it ensures the website is tailored to meet those needs. It also focuses on attracting the right audience, keeping them engaged, and encouraging them to take actions like making a purchase, signing up for a newsletter, or contacting the business.

Beyond creating websites, a web agency often offers additional services like managing online marketing campaigns, optimizing websites for search engines (SEO), and providing regular updates and support. This means a business can rely

on it not just to build the site but also to maintain and grow it over time.

By partnering with a web agency, a business saves time and effort while ensuring its online presence is handled by professionals. This allows the business to focus on its core activities while leaving the technical and creative aspects of online success in capable hands.

Future scope

The future of web agencies looks bright as they continue to adapt and grow. They will focus on creating smart , user-friendly, and accessible websites . Key areas include using AI to improve features , boosting SEO for better visibility, and enhancing e-commerce platforms for online shopping. Web agencies will also offer regular website maintenance and adopt eco- friendly practices, like energy-efficient hosting. Expanding into digital marketing and custom app development will help them provide complete solutions, making them valuable partners for businesses aiming for long-term success online.

8.REFERENCES

1. Bootstrap. (2022). Bootstrap - The most popular HTML, CSS, and JS library in the world. https://getbootstrap.com/

2. MDN Web Docs. (n.d.). HTML: Hyper Text Markup Language. https://developer.mozilla.org/en-US/docs/Web/HTML

3. Stack Overflow. (n.d.). https://stackoverflow.com/

4. W3Schools. (n.d.). Bootstrap 4 Tutorial. https://www.w3schools.com/bootstrap4/default.asp

5. Adobe Stock. (n.d.). Stock Photos, Royalty-Free Images, Graphics, Vectors & Videos. https://stock.adobe.com/

6. Google Fonts. (n.d.). Google Fonts. https://fonts.google.com/

7. Canva. (n.d.). Design Anything. Publish Anywhere. https://www.canva.com/