

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590010



INTERNSHIP PROJECT REPORT ON

FULL STACK WEB DEVELOPMENT PERSONAL BLOG

Submitted in partial fulfillment for the award of degree (18CSI85).

BACHELOR OF

ENGINEERING IN

COMPUTER SCIENCE AND ENGINEERING

For the Academic Year 2023 - 2024

Submitted by:

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1JS21CS403



CONDUCTED AT

VARCONS TECHNOLOGIES PVT LTD.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING.

JSS ACADEMY OF TECHNICAL EDUCATION

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CERTIFICATE

It is certified that the **INTERNSHIP PROJECT** entitled "**FSWD PERSONAL BLOG** " is carried out by **DIVYASHREE J -1JS21CS403** bonafide **Students of JSS academy of technical education** in partial fulfillment for the 7th semester for the award of the Degree of Bachelor of Engineering in Information Science and Engineering of the **Visvesvaraya Technological University, Belagavi** during the academic year **2023-2024**. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the course of Bachelor of Engineering.

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1)

2)

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DECLARATION

We **DIVYASHREE J(1JS21CS403)** final year students of computer science and engineering ,JSS academy of technical education-56006 Declare that the internship has been sucesfully completed,in varcons technologies.this report is submitted in partial fulfillment of the requirements for award of bachelor degree in computer science and engineering,during the academic year 2022-2023

Date:21/09/2023

Place :Bangalore

Signature of Student

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ABSTRACT

A personal blog project represents a dynamic intersection of creative expression and technical expertise in the realm of full-stack web development. It embodies the fusion of design aesthetics, user interaction, and robust functionality. This endeavor typically encompasses the selection of a technology stack, including front-end frameworks and back-end solutions, to craft an engaging and visually appealing user interface. User authentication, content management, and interactive features such as comments and likes are integrated seamlessly, prioritizing user engagement and interaction. Furthermore, security measures, search engine optimization, and responsive design elements are meticulously implemented to ensure a secure, discoverable, and accessible online presence. This project continually evolves, inviting its creator to explore new features, gather insights, and share compelling content with a global audience, making it a dynamic showcase of both development prowess and personal storytelling.

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CHAPTER 1

COMPANY PROFILE

A Brief History of varcons technologies pvt ltd.

Varcons technologies, was incorporated with a goal "To provide high quality and optimal Technological Solutions to business requirements of our clients". Every business is a different and has a unique business model and so are the technological requirements. They understand this and hence the solutions provided to these requirements are different as well. They focus on clients requirements and provide them with tailor made technological solutions. They also understand that Reach of their Product to its targeted market or the automation of the existing process into e-client and simple process are the key features that our clients desire from Technological Solution they are looking for and these are the features that we focus on while designing the solutions for their clients.

Varcons technologies is a Technology Organization providing solutions for all web design and development, MYSQL, PYTHON Programming, HTML, CSS, ASP.NET and LINQ. Meeting the ever increasing automation requirements, Sarvamoola Software Services. specialize in ERP, Connectivity, SEO Services, Conference Management, effective webpromotion and tailor-made software products, designing solutions best suiting clients requirements.

Varcons technologies, strive to be the front runner in creativity and innovation in software development through their well-researched expertise and establish it as an out of the box software development company in Bangalore, India. As a software development company, they translate this software development expertise into value for their customers through their professional solutions.

They understand that the best desired output can be achieved only by understanding the clients demand better. Varcons Technologies work with their clients and help them to define their exact solution requirement. Sometimes even they wonder that they have completely redefined their solution or new application requirement during the brainstorming session, and here they position themselves as an IT solutions consulting group comprising of high caliber consultants.

They believe that Technology when used properly can help any business to scale and achieve new heights of success. It helps Improve its efficiency, profitability, reliability; to put it in one sentence "Technology helps you to Delight your Customers" and that is what we want to achieve.

CHAPTER 2

ABOUT THE COMPANY

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Products of Company

Android Apps

It is the process by which new applications are created for devices running the Android operating system. Applications are usually developed in Java (and/or Kotlin; or other such option) programming language using the Android software development kit (SDK), but other development environments are also available, some such as Kotlin support the exact same Android APIs (and bytecode), while others such as Go have restricted API access.

The Android software development kit includes a comprehensive set of development tools. These include a debugger, libraries, a handset emulator based on QEMU, documentation, sample code, and tutorials. Currently supported development platforms include computers running Linux (any modern desktop Linux distribution), Mac OS X 10.5.8 or later, and Windows 7 or later. As of March 2015, the SDK is not available on Android itself, but software development is possible by using specialized Android applications.

Web Application

It is a client–server computer program in which the client (including the user interface and client-

side logic) runs in a web browser. Common web applications include web mail, online retail sales, online auctions, wikis, instant messaging services and many other functions. web applications use web documents written in a standard format such as HTML and JavaScript, which are supported by a variety of web browsers. Web applications can be considered as a specific variant of client-server software where the client software is downloaded to the client machine when visiting the relevant web page, using standard procedures such as HTTP. The Client web software updates may happen each time the web page is visited. During the session, the web browser interprets and displays the pages, and acts as the universal client for any web application. The use of web application frameworks can often reduce the number of errors in a program, both by making the code simpler, and by allowing one team to concentrate on the framework while another focuses on a specified use case. In applications which are exposed to constant hacking attempts on the Internet, security-related problems can be caused by errors in the program

Frameworks can also promote the use of best practices such as GET after POST. There are some who view a web application as a two-tier architecture. This can be a “smart” client that performs all the work and queries a “dumb” server, or a “dumb” client that relies on a “smart” server. The client would handle the presentation tier, the server would have the database (storage tier), and the business logic (application tier) would be on one of them or on both. While this increases the scalability of the applications and separates the display and the database, it still doesn’t allow for true specialization of layers, so most applications will outgrow this model. An emerging strategy for application software companies is to provide web access to software previously distributed as local applications. Depending on the type of application, it may require the development of an entirely different browser-based interface, or merely adapting an existing application to use different presentation technology. These programs allow the user to pay a monthly or yearly fee for use of a software application without having to install it on a local hard drive. A company which follows this strategy is known as an application service provider (ASP), and ASPs are currently receiving much attention in the software industry.

Security breaches on these kinds of applications are a major concern because it can involve both enterprise information and private customer data. Protecting these assets is an important part of any web application and there are some key operational areas that must be included in the development process. This includes processes for authentication, authorization, asset handling, input, and logging and auditing. Building security into the applications from the beginning can be more effective and less disruptive in the long run.

Web design

It encompasses many different skills and disciplines in the production and maintenance of websites. The different areas of web design include web graphic design; interface design; authoring, including standardized code and proprietary software; user experience design; and

search engine optimization. The term web design is normally used to describe the design process relating to the front-end (client side) design of a website including writing mark up. Web design partially overlaps web engineering in the broader scope of web development. Web designers are expected to have an awareness of usability and if their role involves creating mark up then they are also expected to be up to date with web accessibility guidelines. Web design partially overlaps web engineering in the broader scope of web development

Departments and services offered

Varcons technologies plays an essential role as an institute, the level of education, development of student's skills are based on their trainers. If you do not have a good mentor then you may lag in many things from others and that is why we at Compsoft Technologies gives you the facility of skilled employees so that you do not feel unsecured about the academics. Personality development and academic status are some of those things which lie on mentor's hands. If you are trained well then you can do well in your future and knowing its importance of Compsoft Technologies always tries to give you the best.

They have a great team of skilled mentors who are always ready to direct their trainees in the best possible way they can and to ensure the skills of mentors we held many skill development programs as well so that each and every mentor can develop their own skills with the demands of the companies so that they can prepare a complete packaged trainee.

Services provided by the Company

- Core Java and Advanced Java
- Web services and development
- Dot Net Framework
- Python
- Selenium Testing
- Conference / Event Management Service

3.INTRODUCTION

Introduction to FSWD

Full-stack web development is a multifaceted discipline that encompasses the entire process of creating web applications, from the user interface to the server-side logic and database management. Full-stack developers possess a comprehensive skill set that allows them to work on both the front-end, where they design and implement user interfaces using HTML, CSS, and JavaScript, and the back-end, where they develop server-side applications and manage databases. This holistic approach enables them to create fully functional, dynamic, and interactive websites and web applications. Full-stack web development is in high demand in today's tech industry, as it requires a deep understanding of various programming languages, frameworks, and tools, making it a versatile and valuable skillset for building a wide range of digital solutions. Whether you're interested in building personal projects or pursuing a career in web development, mastering full-stack development provides you with the ability to bring your ideas to life on the internet.

About Web Apps

Web applications are similar to the traditional applications you'd install on your Information, such as Microsoft Office. They are able to perform the same kinds of tasks, they look the same and they feel the same but there is one key difference - the application itself is not installed on your phone or Information, but lives in the cloud. Web apps are not new, but it used to be that they were often unable to compete with more traditional applications for business critical functions or where rich user interaction was required. This is no longer the case. With the power of modern web technologies, we are able to design and build performing, secure, and feature rich applications that live in the cloud and bring with them a huge number of benefits.

1. They can be accessed from anywhere.

- Because web applications are built with web technologies and they run in a web browser Internet Explorer, Google Chrome, Mozilla Firefox – this allows them to be accessed from every web enabled tool. As long as you have an internet connection you can use them.
- It allows for remote working, it allows for rapid publishing of content, it allows for real time collaboration between teams. If you have web access, you have the ability to access your business tools.

2.They are cost effective.

- Web applications are cheaper to produce and maintain than traditional applications. No matter how many platforms your business uses (Mac, Linux, Windows) web application build can be used across them all.

3. They are secure.

- Web developers have had to become experts in security – the web is a platform designed to share everything with everyone! As such, the types and levels of security included in web applications are often far greater than those seen in traditional applications.

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CHAPTER 4

SYSTEM ANALYSIS

1. Choose a Blogging Platform:

Select a platform such as WordPress, Blogger, or Medium for hosting your blog. These platforms are user-friendly and offer various customization options.

2. Plan Your Content:

Create a content calendar with topics you want to cover. Consider starting with foundational topics and gradually moving to more advanced ones.

3. Content Creation:

Write high-quality, informative, and engaging blog posts. Ensure that your content is well-researched and provides value to your readers.

4. Visuals and Multimedia:

- Use visuals like diagrams, charts, and infographics to illustrate your points.
- Consider creating video or audio content to complement your written articles.

5. Blog Design:

- Choose a clean and user-friendly blog design that enhances the reading experience.
- Ensure your blog is mobile-responsive for readers on various devices.

6. Guest Posts and Collaborations:

Invite guest bloggers or collaborate with experts in the field to provide diverse perspectives.

7. Promotion and Marketing:

- Share your blog posts on social media platforms and relevant online communities.
- Consider email marketing to notify subscribers of new content.

8. Analytics and Feedback:

- Use analytics tools to track the performance of your blog and understand your audience's preferences.
- Gather feedback from readers to improve your content and user experience.

9. Stay Updated:

System analysis is an evolving field. Stay updated with the latest trends and developments, and

CHAPTER 5

REQUIREMENT ANALYSIS

Hardware Requirement Specification

- MySQL
- NODE JS
- Notepad++ Editor
- Processor: Intel core i5 processor
- Memory: 15.6 GB
- Hard Disk: 40 GB

Software Requirement Specification

A] Functional Requirements

- Text editor or integrated development environment(IDE)
- Database management system(DBMS)
- Programing languages
- .graphics and design tools

B] Non-Functional Requirements

Availability

The online registration system shall permit backing up of the registration database while other registration actives are going on.

Accessibility

The system shall be accessible by people with specific vision needs to the extent that a user shall be able to display whole user interface in a larger font without truncating displayed text or other values.

Security

The access permissions for system data may only be change by the systems data administrator passwords shall never be viewable at the point of entry or any other time.

CHAPTER 6

DESIGN ANALYSIS

1. Define Your Blog's Purpose and Audience:

Determine the primary purpose of your blog (e.g., sharing knowledge, showcasing projects, or documenting your journey).

Identify your target audience and their interests.

2. Choose the Tech Stack:

Select the technologies and programming languages you'll use for both the front-end and back-end development. For example:

- Front-end: HTML, CSS, JavaScript, and possibly a front-end framework like React or Vue.js.
- Back-end: Node.js, Python, Ruby, PHP, or other server-side languages, along with a suitable web framework like Express, Django, Ruby on Rails, or Laravel.
- Database: Choose a database system (e.g., MySQL, PostgreSQL, MongoDB) based on your project's requirements.

3. Plan the Website Structure:

- Outline the structure of your blog, including pages, categories, and navigation menus.
- Create a sitemap to visualize the layout.

4. Design the User Interface (UI):

Develop wireframes or mockups to design the blog's user interface. Tools like Figma, Sketch, or Adobe XD can be helpful.

Create responsive designs to ensure your blog looks good on various devices and screen sizes.

5. Front-End Development:

- Write the HTML, CSS, and JavaScript code for your blog's front end, incorporating your design.
- Implement features like user registration, login, and comment sections if needed.

6. Back-End Development:

- Develop the server logic, API endpoints, and database interactions.
- Implement user authentication and authorization mechanisms.

7. Database Design:

- Create a well-structured database schema based on your blog's content and data requirements.
- Optimize database queries for performance.

8. Content Management:

- If you're using a CMS like WordPress, configure and customize it according to your design and content needs.
- For custom-built blogs, create an admin panel to manage and publish content.

9. SEO Optimization:

- implement on-page and technical SEO best practices, including optimizing meta tags, URLs, and site speed.
- Create an XML sitemap and submit it to search engines.

CHAPTER 7

IMPLEMENTATION

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively.

The system can be implemented only after thorough testing is done and if it is found to work according to the specification. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over and an evaluation of change over methods as a part from planning.

Two major tasks of preparing the implementation are education and training of the users and testing of the system. The more complex the system being implemented, the more involved will be the system analysis and design effort required just for implementation.

The implementation phase comprises of several activities. The required hardware and software acquisition is carried out. The system may require some software to be developed. For this, programs are written and tested. The user then changes over to his new fully tested system and the old system is discontinued.

TESTING

The testing phase is an important part of software development. It is the Information zed system will help in automate process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied. Software testing is carried out in three steps:

- The first includes unit testing, where in each module is tested to provide its correctness, validity and also determine any missing operations and to verify whether the objectives have been met. Errors are noted down and corrected immediately.
- Unit testing is the important and major part of the project. So errors are rectified easily in particular module and program clarity is increased. In this project entire system is divided into several modules and is developed individually. So unit testing is conducted to individual modules.

The second step includes Integration testing. It need not be the case, the software whose modules when run individually and showing perfect results, will also show perfect results . <!DOCTYPE

SOURCE CODE

```
<html>

<html>

<head>

<meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>My Blog</title>

    <!-- Add CSS for styling -->

    <link rel="stylesheet" href="styles.css">

</head>

<body>

    <header>

        <h1>My Blog</h1>

        <!-- Add navigation menu here -->

        <nav>

            <ul>

                <li><a href="#">Home</a></li>

                <li><a href="#">About</a></li>

                <li><a href="#">Contact</a></li>

            </ul>

        </nav>

    </header>

    <main>
```

```
<section class="blog-post">

  <h2>Blog Post Title 1</h2>

  <p>Posted on: September 15, 2023</p>

  <!-- Add blog content here -->

  <p>This is the content of your blog post.</p>

  <!-- Add media (images, videos) here -->

</section>


<section class="blog-post">

  <h2>Blog Post Title 2</h2>

  <p>Posted on: September 14, 2023</p>

  <p>This is another blog post.</p>

</section>


<!-- Add more blog posts as needed -->

</main>


<footer>

  <p>&copy; 2023 My Blog</p>

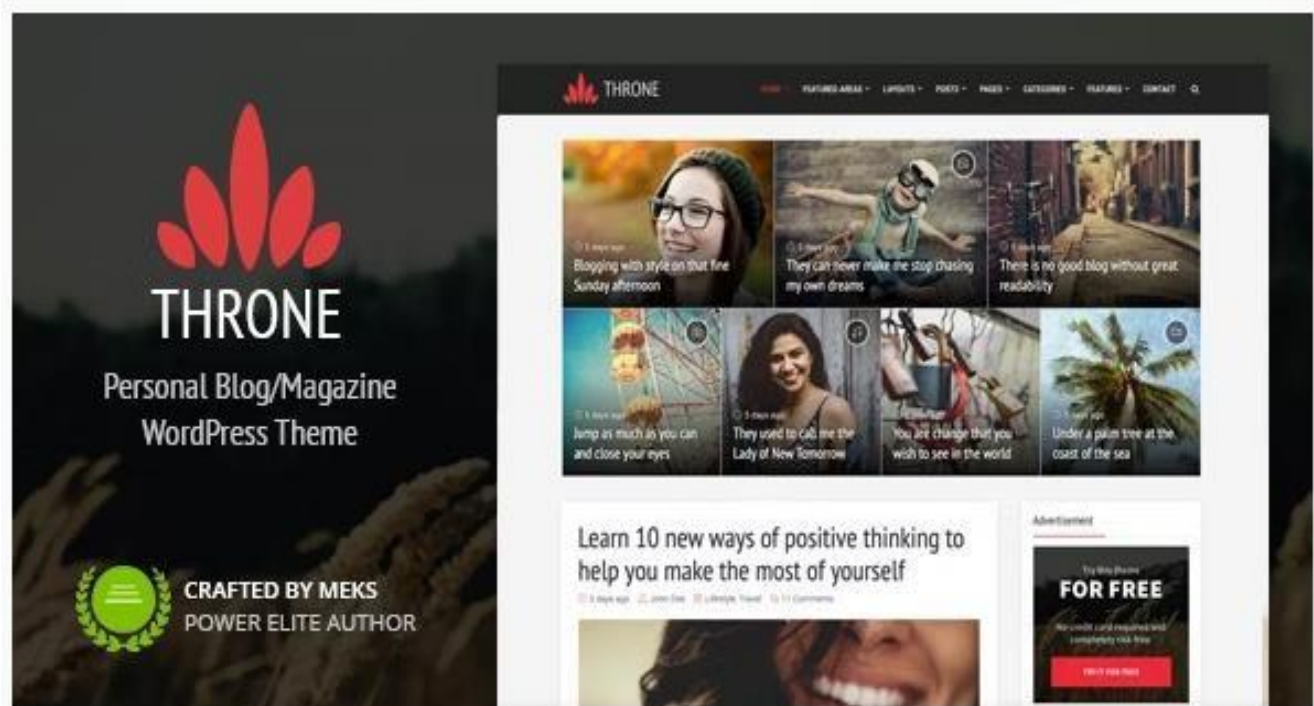
</footer>

</body>

</html>
```

CHAPTER 8

SNAPSHOTS



8.1 TEMPLATES





CHAPTER 9

CONCLUSION

In conclusion, embarking on the journey of becoming a full-stack web developer has been both challenging and rewarding. Through countless hours of learning, coding, and problem-solving, I've gained a deep understanding of both front-end and back-end development, as well as the tools and technologies that power the web.

One of the key takeaways from this experience is the importance of continuous learning. Web development is a field that constantly evolves, with new frameworks, libraries, and best practices emerging regularly. Staying up-to-date and adaptable is crucial to success in this industry.

Furthermore, collaboration and communication skills are equally vital. Web development often involves working with diverse teams, including designers, other developers, and clients. Effective communication can make or break a project, so it's essential to develop these soft skills.

Ultimately, full-stack web development is not just about writing code; it's about creating user-friendly, efficient, and secure web applications that provide value to users. It's a dynamic field that offers endless opportunities for growth and innovation. Whether you're building your own projects or working for a company, the skills you've acquired on this journey will serve you well in the ever-evolving world of web development.

CHAPTER 10

REFERENCE

- <https://github.com/>
- [Youtubes](#)
- [Geeks for geeks](#)