ANALYSIS AND OPTIMIZATION

in

WEB APPLICATION

PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

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Mini Project Report

Aim:-

The aim of this project is to design and implement a comprehensive digital marketing strategy—including SEO optimization, LinkedIn outreach, and email marketing—to effectively promote the OIL SOIL platform, increase its online visibility, attract targeted audiences, and drive user engagement and lead generation.

Objective :-

- **Enhance Website Visibility**
  To improve the search engine ranking of the Oil Soil website through effective SEO techniques, thereby increasing organic traffic.
- **Drive Targeted Outreach**
  To execute a LinkedIn campaign aimed at engaging industry professionals, influencers, and potential clients relevant to the Agricultural domain.
- **Generate and Nurture Leads**
  To develop and implement an email marketing strategy that captures leads and maintains engagement through personalized communication.
- **Increase Brand Awareness**
  To strengthen the online presence and credibility of the Oil Soil platform across digital channels.
- **Analyze and Optimize Campaign Performance**
  To continuously monitor key performance metrics and optimize marketing strategies for better reach, conversion, and ROI

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3. Programming Languages Used :-

Although WordPress handles most of the backend functionality, the underlying technologies involved in this project include:

- **HTML (Hypertext Markup Language):** For structuring the content.

- **CSS (Cascading Style Sheets):** For styling and visual design.

- **JavaScript:** For dynamic behavior and interactivity.

4. Implementation :-

The implementation of the AI Innovation promotional strategy was carried out in four key stages: website development, SEO optimization, LinkedIn outreach, and email marketing.

- **Website Development and Deployment**
  A responsive and visually engaging website was developed using **HTML, CSS, and JavaScript** to showcase the features and value proposition of the Oil Soil platform. The site was deployed using **GitHub Pages**, enabling free and fast hosting with version control via Git.

- **Search Engine Optimization (SEO)**
  Post-deployment, SEO optimization was conducted using **Google Page Speed Insights** to analyze and enhance website performance. Improvements were made to loading speed, mobile responsiveness, and accessibility. Relevant keywords, meta tags, and structured content were also added to boost search engine visibility.

- **LinkedIn Campaign**
  A strategic **LinkedIn campaign** was launched to increase brand awareness and reach professionals in the Agricultural domains. Content such as posts, infographics, and project updates was shared regularly. Additionally, personalized connection requests and direct messages were sent to potential stakeholders to drive website traffic and engagement.

- **Email Marketing with Mailchimp**
  To nurture leads and maintain engagement, **Mailchimp** was used to design and distribute email newsletters. A contact list was built through LinkedIn and website sign-ups, followed by segmented email campaigns that shared platform updates, insights, and calls to action. Campaign performance was tracked through open rates and click-through analytics.

5. <u>Dependencies:-</u>

Web Technologies

- **HTML, CSS, JavaScript** – For building and styling the website.
- **Git & GitHub** – For version control, project collaboration, and deployment via GitHub Pages.

Hosting and Deployment

- **GitHub Pages** – Used to host and serve the static website online.

SEO and Performance Tools

- **Google PageSpeed Insights** – For analyzing and optimizing website speed, accessibility, and SEO health.

- **Meta Tags & Keywords –** Integrated into the website for search engine discoverability.

Digital Marketing Platforms

- **LinkedIn –** Used for professional networking, brand promotion, and direct outreach campaigns.

- **Mailchimp –** For creating and managing email marketing campaigns, contact segmentation, and tracking performance metrics.

Browsers and Devices

- Cross-browser and responsive support was ensured to provide a consistent experience across Chrome, Firefox, Safari, and mobile devices.

6. Output :

Website:

The **OilSoil** website is an awareness and service platform focused on promoting eco-friendly engine oil disposal and maintenance practices. Developed using HTML, CSS, and JavaScript, it encourages users to **"Go Green While Fixing and Maintaining Their Engine."** The site educates visitors about the environmental hazards of improper oil disposal and offers a booking option for safe oil handling services. Deployed using GitHub Pages, the website combines

impactful visuals with a clear sustainability message.

SEO:
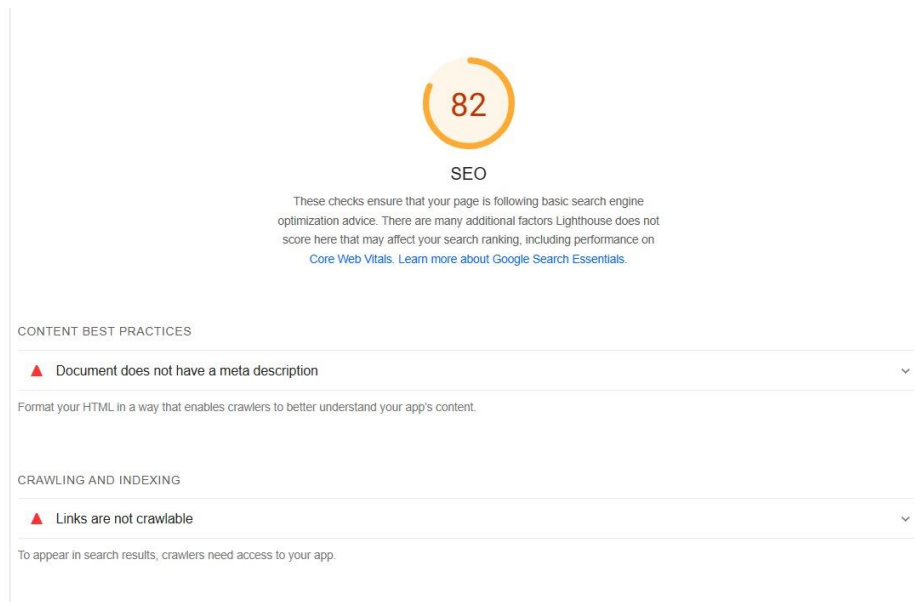
100

SEO

These checks ensure that your page is following basic search engine optimization advice. There are many additional factors Lighthouse does not score here that may affect your search ranking, including performance on Core Web Vitals. Learn more about Google Search Essentials.

ADDITIONAL ITEMS TO MANUALLY CHECK (1)   Hide

○   Structured data is valid   ⌄

Run these additional validators on your site to check additional SEO best practices.

PASSED AUDITS (8)   Show

NOT APPLICABLE (2)   Show

LinkedIn Campaign:

E-Mail Marketing:

Conclusion:

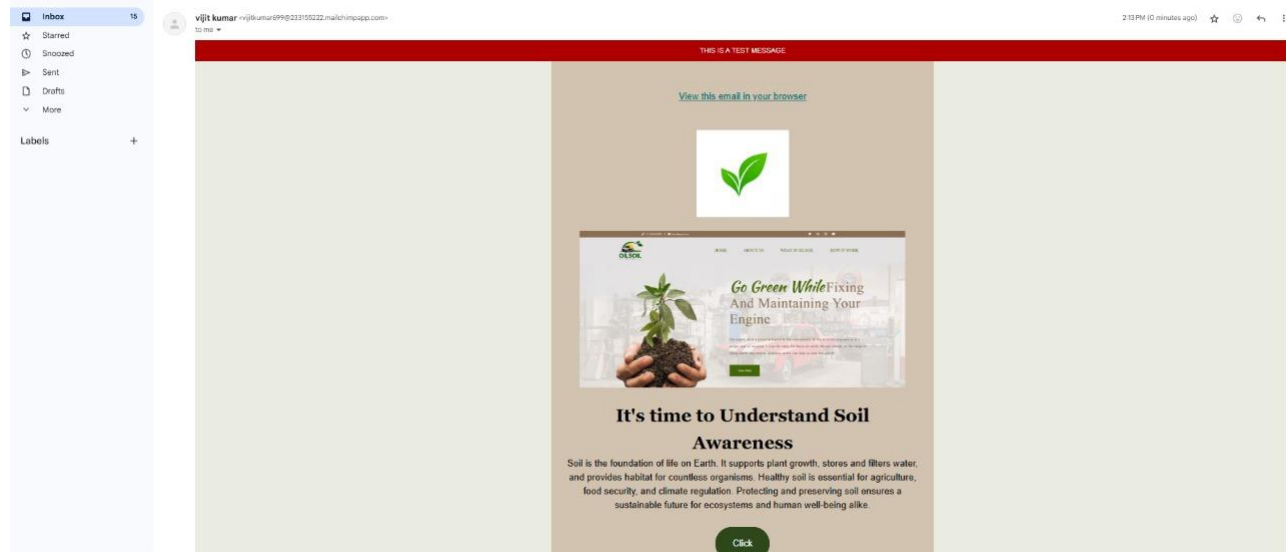The Oil Soil project successfully demonstrated how a combination of web development and strategic digital marketing can be leveraged to build and promote an environmental awareness platform. By creating a responsive and visually appealing website using HTML, CSS, and JavaScript, and deploying it through GitHub Pages, the project established a strong digital presence. SEO optimization via Google Page Speed Insights helped improve the website's visibility and performance, while targeted LinkedIn campaigns and personalized email marketing through Mailchimp effectively engaged the audience and generated interest. Overall, the project met its objectives of increasing reach, enhancing brand awareness, and promoting sustainable oil disposal practices, showcasing the impact of integrated digital strategies in supporting eco-conscious initiatives.

Learning Outcomes:

- Gained hands-on experience in building and deploying a website using HTML, CSS, and JavaScript.
- Learned how to host a static website using GitHub Pages.
- Understood the fundamentals of SEO and how to optimize website performance using Google Page Speed Insights.
- Acquired practical knowledge of running professional LinkedIn marketing campaigns.
- Gained experience in designing and managing email campaigns using Mailchimp.
- Developed skills in audience targeting, lead generation, and digital engagement strategies.
- Improved understanding of performance analytics and how to adapt strategies based on data.
- Enhanced project planning, coordination, and execution abilities in a real-world context.

Git Hub Link:-

https://github.com/vijit200/EROWP