### **Project Proposal Document**

#### **Website project:**

**Designing the Company Website for Improved User Experience**

#### **Project Overview:**

Almost every successful company has an online supply of inventory that gets sold to customers/consumers every day in this modern day in age. What’s a more efficient way to advertise your company than posting content online? Companies can post their supplies online to reach more people and improve sales. The more people get advertised, the more sales, and more sales means more profit. The owner of a local computer hardware store wants a website developed to be accessible to their customers in different areas of the country, using their own on-premises server to host the website. The owner’s plan is to have the website developed so they can start creating targeted ads. The owner has asked us (IT team) to create the website.

#### **Project Objectives:**

* To design a user-friendly (UX) website.
* To make the company globally accessible.
* To increase the company’s flow of lead generation.
* To expand the company through the internet.

#### **Scope of Work:**

* **Research & Analysis:**

The IT team will need a company logo, company slogan, type of computer hardware sold (GPUs, CPUs, Motherboards, etc.), company owners' biography, a local computer network topology sheet, Branding ideas, and the company’s Domain name.

* **Design Phase:**  
  The website will be made public. All clients that connect to the website must submit a form including their names and contact information. This data will be stored in a MySQL DBMS server and will be later provided in a detailed sales report to the company. The website will have a biography of the owner, and a summary of the company and what they do. The IT team will track lead generation from the website using Java programming. The website will allow the client to generate targeted ads.
* **Development Phase:**  
  The frontend of the website will be developed in HTML and CSS. The backend will be developed in Java programming. The IT team will use IntelliJ IDEA as our IDE. The IT team will follow the MVC (Model-Viewer-Controller) framework for this project. The website is going to be hosted on a local on-premises server, provided by the client. The website will also be hosted via HTTPS for TLS/SSL encryption. All default passwords will be customized, and all data will be managed/maintained by the IT team to ensure security. Sales reports will be provided each month to the client by querying the MySQL RDBMS. Clients will not have elevated privileges to query the database. The code dependencies for this project include Spring Data JPA, Thymeleaf, MySQL Driver, Spring Web, and Spring Web Services.
* **Testing & QA:**  
  The website will be tested using JUnit testing by isolating units of code to ensure they work as expected. The IT Team will perform web application testing by submitting forms from the website and browsing on the website as if we were customers. (Transferring lead contact information successfully to MySQL). To ensure the website is secure, the IT team will perform web application Pen Testing by following the Kill Chain method. The client agrees to allow the IT team to conduct vulnerability scans, and exploits.
* **Launch & Post-Launch Support:**  
  Deploy the website and monitor its performance post-launch. The IT team will provide maintenance and support for any issues that arise in the first 90 days from the date of deployment.
* **Maintenance**:

The IT team will meet with the clients every month to perform regular content updates, security monitoring, backups/recovery, DBMS management, UX, perform system updates to the host (on-premises server), MySQL database and website.

#### **Timeline:**

|  |  |  |
| --- | --- | --- |
| **Phase** | **Start Date** | **End Date** |
| Research & Analysis | January 1st, 2025 | January 10th, 2025 |
| Design Phase | January 11th, 2025 | January 20th, 2025 |
| Development Phase | January 21st, 2025 | March 10th, 2025 |
| Testing & QA | March 11th, 2025 | April 11th, 2025 |
| Launch & Post-Launch Support | April 20, 2025 | Ongoing |

#### **Budget Estimate:**

|  |  |
| --- | --- |
| **Item** | **Cost Estimate** |
| Research & Analysis | $2,000 |
| Design Phase | $5,000 |
| Development Phase | $12,000 |
| Testing & QA | $3,000 |
| Launch & Post-Launch Support | $1,500 |
| **Total Estimated Cost** | **$23,500** |

#### **Project Team:**

* **Project Managers**: Nathaniel Carrasquillo, Kevin Molina, Ernstky Louis, and Michael Vera  
  Responsible for overseeing the project and ensuring it stays on schedule.
* **Lead Designers**: Nathaniel Carrasquillo, Kevin Molina, Ernstky Louis, and Michael Vera  
  Responsible for creating the visual design and user interface (UI).
* **Lead Developers**: Nathaniel Carrasquillo, Kevin Molina, Ernstky Louis, and Michael Vera  
  Responsible for front-end and back-end development.
* **Quality Assurance Specialists**: Nathaniel Carrasquillo, Kevin Molina, Ernstky Louis, and Michael Vera  
  Responsible for testing the website and ensuring quality standards.

#### **Risk Management:**

* **Risk:** Delays in design approval  
  **Mitigation:** Set up regular check-ins with stakeholders to get early feedback and approval.
* **Risk:** Budget overruns due to unforeseen issues  
  **Mitigation:** Keep a contingency budget of 10% for unexpected costs.

#### **Success Metrics:**

* Improved website traffic by 20% within the first 3 months of launch.
* Increase in user engagement and average session duration by 15%.
* Higher conversion rates for lead generation or e-commerce transactions.
* Positive feedback from user testing sessions post-launch.

#### **Conclusion:**

The design of the website will offer growth opportunities for the local computer hardware store. The website provides a user-friendly interface that can be targeted to a niched audience. Highly motivated leads will be streamlined through the website to increase customer sales.

**Prepared by:**  
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