**Title: Website for Automated Scope 3 Emissions Quantification**

**Freelancer Job description:**

**About VeriCO₂:** VeriCO₂ (Verified Emissions Reporting and Integrity for Carbon Offsets) is a pioneering tool that quantifies a company's scope 3 emissions, deters greenwashing, and facilitates the sale and distribution of environmental credits. Through the innovative use of web scraping and natural language processing, VeriCO₂'s first phase offers a comprehensive view of a company's scope 3 emissions, derived from the scope 1 and 2 emissions of their suppliers.

**Project Overview:** We are seeking a talented and experienced freelancer to create a visually appealing and user-friendly website for VeriCO₂. This project involves both front-end design and back-end data management, aligning with the Greenhouse Gas Protocol's Technical Guidance for Calculating Scope 3 Emissions. The guidance document is attached.

**Responsibilities:**

1. Front-End Development:

• Design a visually stunning and intuitive user interface for VeriCO₂.

• Ensure a seamless user experience with responsive design across various devices.

2. Back-End Development:

• Implement web scraping and natural language processing to automatically retrieve scope 1 and 2 emissions data for ASX-listed companies.

• Store the retrieved data in a structured database.

• Automate the process of sourcing emission factors and the scope 1 and 2 emissions of suppliers.

3. User Interaction:

• Develop a user-friendly input system for users to list their suppliers and answer questions for each of the 15 scope 3 categories.

• Automate as much as possible the calculation of scope 3 emissions for each category.

• Create beautiful visualizations to represent the calculated data.

4. Automation and Integration:

• Ensure as much of the tool as possible is automated for efficiency.

• Integrate the front-end and back-end systems seamlessly.

**Qualifications:**

• Proven experience in front-end technologies such as HTML, CSS, JavaScript.

• Strong expertise in back-end development, including web scraping and natural language processing.

• Familiarity with environmental data, particularly emissions calculations, is a plus.

• Strong attention to detail and commitment to delivering a high-quality product.

**Application Process:** Interested candidates are invited to submit their portfolio, resume, and a brief cover letter detailing their relevant experience and motivation for the project.

**Step 1: Understand the Project Requirements**

* Familiarise yourself with the Greenhouse Gas Protocol's Technical Guidance for Calculating Scope 3 Emissions.
* Review the goals and functionalities of VeriCO₂.
* Confirm the project timeline and deliverables with the client.

**Step 2: Design the Front-End**

* Sketch the initial design and layout for the VeriCO₂ website.
* Create wireframes and prototypes to visualise the user interface.
* Develop the front-end using HTML, CSS, JavaScript, or other relevant technologies.
* Ensure the design is responsive and user-friendly across various devices.

**Step 3: Develop the Back-End**

* Set up the database to store scope 1 and 2 emissions data for ASX-listed companies.
* Implement web scraping techniques to automatically retrieve the required data.
* Utilise natural language processing to analyse and structure the data.
* Integrate the back-end with the front-end.

**Step 4: Automate Data Retrieval and Calculations**

* Develop algorithms to source emission factors and the scope 1 and 2 emissions of suppliers automatically.
* Create automated workflows for calculating scope 3 emissions for each of the 15 categories.
* Ensure the entire process is as automated as possible for efficiency.

**Step 5: Implement User Interaction Features**

* Design input forms for users to list their suppliers and answer questions for each category.
* Develop interactive visualisations to represent the calculated data beautifully.
* Test the user interaction features to ensure a smooth user experience.

**Step 6: Integrate and Test the Entire System**

* Integrate the front-end and back-end systems seamlessly.
* Conduct thorough testing to identify and fix any bugs or issues.
* Optimize the website for performance and accessibility.

**Step 7: Review and Revise**

* Review the entire project with the client to ensure it meets their expectations.
* Make any necessary revisions or adjustments based on client feedback.
* Prepare the website for launch, including any final optimisations or enhancements.

**Step 8: Launch and Provide Support**

* Deploy the website and ensure it's fully functional.
* Provide documentation and training as needed.
* Offer ongoing support and maintenance as agreed with the client.

**Client’s requirements**

Timelines, milestones and deliverables established.

Regular communication to stay updated on progress.

Conduct or facilitate testing to ensure quality and functionality.

Work with the freelancer to address any post-launch issues or updates.

Assess the project's success against the original objectives.

Complete any final payments and formally close the project.

Everything should be well documented to allow for further developments.

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