Meeting Notes: First Requirements Elicitation for Solar Analytics Mobile Application
Date: September 22, 2024
Attendees:
- **Product Owner (PO):** Elizabeth Ogunyemi
- **Developer (Dev):** Aboze Brain

Meeting Start Time: 10:00 AM

Elizabeth Ogunyemi (Product Owner):
Hello, Aboze. Thanks for joining the meeting today. As the Product Owner, I'd like to share our vision for a new mobile application. We want to build an app that helps users track, monitor, and analyze their energy usage from solar panels. Ultimately, we want to provide them with data-driven recommendations to optimize energy efficiency. Can you tell me what technical considerations we need to be mindful of from a development perspective?

Aboze Brain (Developer):
Thank you, Elizabeth. That sounds like an exciting project. There are several key things we'll need to consider. First, we'll need to establish how we collect and process the energy usage data from the users' solar panels. Does your team have a specific API or hardware integration planned, or will we need to develop that part as well?

Elizabeth Ogunyemi (Product Owner):
Good question. For now, we plan to integrate with existing solar panel systems via APIs provided by vendors. However, we're open to exploring hardware integrations if needed. The primary goal is seamless data collection. We also want the data to be visualized in real time, so users can easily monitor their energy generation and consumption.

Aboze Brain (Developer):
That's great to hear. Integrating with existing APIs should save us some development time. For real-time data visualization, we can use a combination of cloud-based services to process the data streams. We'll need to select a front-end framework that supports smooth, responsive UI. Have you given any thought to what platforms the app will be available on?

Elizabeth Ogunyemi (Product Owner):
We want the app available on both Android and iOS platforms. It's important that users can

access it regardless of their mobile device. Could you outline what that might mean for development and any trade-offs we might face?

Aboze Brain (Developer):
Developing for both Android and iOS will mean using either native development frameworks like Swift for iOS and Kotlin for Android or adopting a cross-platform solution like Flutter or React Native. Cross-platform would allow us to reuse most of the code, speeding up development, but it could come with some limitations in terms of performance and accessing specific device features. If we go native, it will provide more flexibility and performance optimization, but it will take longer and cost more.

Elizabeth Ogunyemi (Product Owner):
That makes sense. Let's weigh the pros and cons and decide based on what's best for the user experience. Another thing—users should receive personalized recommendations on how to improve their energy efficiency. Do you think we could integrate machine learning for that?

Aboze Brain (Developer):
Absolutely. Machine learning can be used to analyze energy usage patterns and provide recommendations based on historical data. We'd need to collect enough user data to train the models, or we could start with predefined recommendation rules and evolve toward ML as more data is gathered. This could be processed either on-device or in the cloud, depending on the complexity of the models. Would you prefer to start simple and then scale up, or jump into machine learning from the beginning?

Elizabeth Ogunyemi (Product Owner):
I think starting simple and scaling up is the best approach. We can offer basic tips to users based on industry standards first, then gradually incorporate more advanced recommendations as the app evolves. Is there anything else we should think about from a technical or user experience perspective?

Aboze Brain (Developer):
We'll need to consider how users interact with the app and the frequency of their data updates. For instance, we'll have to optimize data sync intervals to balance real-time monitoring with battery consumption, especially for mobile devices. We'll also need to ensure that the app provides clear and actionable insights, so users don't feel overwhelmed by the data. We could also integrate notifications for high usage or significant energy events.

Elizabeth Ogunyemi (Product Owner):
That's an excellent point. We want the app to be user-friendly and insightful, not overwhelming. Let's make sure we build in some testing time for usability and gather early feedback from potential users. Thanks for your input, Aboze. I think we have a good starting point. Let's revisit this in our next meeting once we have a draft of the technical requirements.