Quantum Leap Enterprises Project

Prepared for:
Quantum Leap Enterprises

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Executive Summary

This project by Quantum Leap Enterprises focuses on developing a natural, feel-good energy drink targeted toward women, paired with a digital wellness web platform and mobile app. The energy drink is formulated to enhance energy, mental clarity, hormone balance, immune strength, and gut health, catering to women aged 25-55. The web platform and mobile app deliver community engagement through friend profiles, educational resources, and a merchandise shop to support this product, transforming the drink into a complete lifestyle solution.

Key requirements focus on user engagement, data privacy, and security, with all digital interactions built to comply with GDPR standards. The project's emphasis on local sourcing, job creation, and community partnerships aligns with Quantum Leap's mission of positive social impact. This initiative not only targets improved well-being for users but also strengthens connections within the community, making Quantum Leap Enterprises a leader in health-conscious innovation.

Introduction

Quantum Leap Enterprises is launching a natural energy drink tailored to women's health needs, supported by a digital platform to enhance the overall user experience. The drink is specifically formulated to address common wellness goals among women, including improved energy levels, mental focus, hormone balance, immunity, and gut health.

The web platform and mobile app play a crucial role, offering personalised health advice, feedback collection, and a friend profile aspect, allowing users can share experiences and support each other. This holistic approach aims to create a product that is more than just a drink; it is a lifestyle brand designed to empower women on their health journey.

This document outlines the functional and non-functional requirements of the project, along with key legal, ethical, social, and professional considerations, laying the groundwork for a responsible, impactful, and sustainable health solution.

Functional and Non-Functional Requirements

Functional Requirements

1. ### Must-Have Requirements
   - Interactivity: The app and web platform must both include a functioning navigation bar, allowing users to navigate both platforms seamlessly.
   - Product Information: The web platform must provide detailed product information, including the ingredients and the health benefits.
   - Educational Content: The web platform must include educational content, such as articles, videos, and health tips which are easily accessible to users.
   - Health Advice: The web platform must provide a section where women can receive personalised health advice.
   - Feedback Collection: Gathering user feedback is a core function for understanding customer experience. The web platform must offer a user-friendly feedback mechanism, enabling users to share their thoughts and opinions on the energy drink.
   - Login/Logout Features: To safeguard user data, the mobile app must implement secure user authentication and login mechanisms. This feature ensures that personal information is accessible only to the intended user.
   - Friends Profiles: The app must enable users to connect with friends, view their profiles, and compare achievements or streaks, fostering social engagement.

2. ### Should-Have Requirements
   - Gamification Elements: Incorporating gamification elements within the app, such as a point-based reward system for tracking consistency and achievement badges can significantly improve user engagement.
   - Data Encryption: Sensitive data, such as health data, collected on the website should be encrypted to ensure data privacy and security.
   - Push Notifications: Push notifications serve as gentle reminders for users to engage with the app.
   - App Download Link: The web platform should include a clear, accessible download link for the app. This link should redirect users to the appropriate app store based on the device being used to access the website.
   - Privacy Policy: The web platform should include an easily accessible privacy policy page. This page should clearly outline how user data is collected, stored, and used, ensuring transparency, and building user trust.

3. ### Could-Have Requirements
   - Interactive Educational Content: Interactive content on the web platform could provide a dynamic learning experience, making health education more engaging and accessible.

- Company Purchase Option: The web platform should provide an option for companies to place bulk orders or inquire about purchasing the product for resale or distribution. This feature could include a dedicated "Business Inquiries" section or form to facilitate corporate purchases.
- Merchandise Shop Integration: The mobile app should include a merchandise shop where users can use points earned through the rewards system to redeem merchandise. The shop should allow users to browse available products and view their points balance.

4. Won't-Have (For Now)
- Integration with Wearables: Integrating the app with wearable devices like fitness trackers or smartwatches is not a priority for the initial phase. While this feature could enhance data collection, it will be revisited in future updates.
- Offline Mode: Given the data collection and interactive features, the app will not support offline usage at this stage.
- Social Media Sharing: Social media integration with the app could allow users to share their achievements on platforms such as Instagram or Facebook. While this feature could boost brand visibility and create a sense of community, it will be revised in future updates.

Non-Functional Requirements

1. Must-Have Requirements
- Security and Data Privacy: The app and web platform must adhere to GDPR and the Data Protection Act. Secure data handling, storage and access to controls are critical, given the personal data involved.
- Scalability: Both the web platform and app must be scalable to accommodate growth in the user base. This scalability should apply to both the backend infrastructure and the user interface, ensuring smooth operation as more users join.
- Performance: The web platform and app should be responsive, with minimal latency during interactions. Fast response times are particularly important for features such as health tracking, feedback submission, and AI insights.
- Reliability: The system should be designed to minimise downtime and have robust recovery protocols in place. Maintaining high availability is essential to avoid disrupting the user experience.
- Maintainability: The app and web platform should be developed with a modular design, allowing individual components to be updated or modified independently.

2. Should-Have Requirements

- Accessibility: The platform should meet accessibility standards, ensuring usability for users with disabilities.
- User-Friendly Interface: The interface should be intuitive, aesthetically pleasing, and designed with the target demographic in mind, ensuring ease of use for all users.
- Cross-Platform Compatibility: The app should work seamlessly across both iOS and Android devices. The web platform should support all major browsers to maximise accessibility.

3. Could-Have Requirements

- Multilingual Interface: As the product expands to international markets, offering multilingual support could enhance accessibility for non-English-speaking users.
- Dark Mode: Offering a dark mode on both the web platform and the app could appeal to users who prefer it, adding another layer of personalisation.

LESP: Legal, Ethical, Social and Professional Issues

Legal Issues

Given the personal health data collected, the project must comply with GDPR and the Data Protection Act to ensure user privacy and data security. This includes clear data handling policies, user consent, and enabling users to control their data, such as accessing or deleting it. Compliance with food safety and health regulations is also essential.

Ethical Issues

The use of the health advice form raises ethical concerns about privacy and data transparency. Users should be informed on how their data is used. Health claims made in marketing and product descriptions should be scientifically validated to avoid misleading users.

Social Issues

The project has the potential to positively impact local communities by creating job opportunities and fostering collaborations with local suppliers in Scotland. However, the brand has a responsibility to promote health and realistic wellness standards. Engaging users through feedback loops and a point-based rewards system encourages a supportive, health-conscious environment.

Professional Issues

Maintaining high standards in data management and customer engagement is essential to building brand credibility. Partnering with reputable health professionals and ensuring accurate health information reinforces professionalism. Transparency in all brand communications and interactions with users is critical for establishing trust.

Conclusion and Future Work

In conclusion, this project for Quantum Leap Enterprises combines a natural energy drink with a robust digital wellness platform to provide a comprehensive health solution for women. By addressing unique wellness needs, this initiative supports users in achieving their health goals while fostering a supportive community. The functional and non-functional requirements outlined in this document ensure the project meets its objectives, prioritising user engagement, data security, and scalability for long-term impact.

Future work will focus on expanding the platform's features, such as integrating social media sharing, and wearable device compatibility, as well as introducing multilingual support to serve a broader, international audience. Additional community features can further personalise the user experience. As the brand grows, Quantum Leap Enterprises aims to strengthen its role as a leader in health-conscious innovation, empowering more women everywhere to take control of their well-being.

Appendix

GitHub Repo Link:
https://github.com/xXWooperFan69Xx/Real-World-Project-Drink

Ethics Form:
Ethics Form.docx
This document is also included in the GitHub main branch, saved as Ethics Form
https://github.com/xXWooperFan69Xx/Real-World-Project-Drink/blob/main/Ethics%20Form.pdf

Data Protection Impact Assessment:
Data Protection Impact Assessment.docx
This document is also included in the GitHub main branch, saved as Data Protection Impact Assessment
https://github.com/xXWooperFan69Xx/Real-World-Project-Drink/blob/main/Data%20Protection%20Impact%20Assessment.pdf

Meeting Minutes:
A table containing our team's meeting minutes with Aladin from Quantum Leap Enterprises is below.

Date	Minutes Completed	Description
01/10/2024	30 minutes	In-person initial meeting with client
09/10/2024	Approximately 45 minutes	Zoom meeting with client
11/10/2024	Approximately 45 minutes	Zoom meeting with client
16/10/2024	Approximately 45 minutes	Zoom meeting with client
18/10/2024	Approximately 45 minutes	Zoom meeting with client
29/10/2024	30 minutes	In-person catchup meeting with client
Total Minutes	Approximately 240 minutes (4 hours)	

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