**I. Project Team**

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**II. Project Title**

*TechGear*

This project leverages modern web technologies to create a reliable and scalable platform, ensuring a smooth and enjoyable shopping experience for both customers and administrators.

**III. Project Introduction**

This platform allows users to browse and purchase various tech items, each organized into specific categories. To access the store, users must first register. Additionally, admins have special permissions to update item quantities and prices, ensuring accurate inventory management.

**Key Features:**

1. User Registration and Authentication
2. Product Categories
3. Admin Controls
4. User-Friendly Interface
5. Search Tool

**IV. Project Description**

**Scope**

TechGear is a C++ program designed to provide a seamless shopping experience for technology enthusiasts. The platform aims to offer a wide range of tech products organized into categories, with functionalities for user registration, secure authentication, and robust admin controls for managing inventory and pricing.

**Limitations and Constraints:**

* **User Authentication Requirement**
* **Admin Access**
* **Scalability**
* **Resource Intensive**

**Problem Solved**

TechGear addresses the need for a secure and organized system for purchasing tech products. By requiring user registration and providing admin controls, it ensures a safe shopping environment and efficient inventory management. This helps both users and administrators maintain a reliable and enjoyable shopping experience.

**Sustainable Development Goal:**

Goal 9: Industry, Innovation, and Infrastructure

TechGear aligns with SDG 9 by promoting sustainable industrialization through the development of an innovative e-commerce platform. The project leverages technology to enhance ideas, providing a digital marketplace that supports secure and technological advancement.

**V. Technologies**

C++, MySQL, Figma, Raylibs

**VI. References**

E-commerce Security: An Essential Guide to Online Business

* Author: Julie S. Miller
* Summary: This book provides comprehensive insights into securing online transactions and protecting user data, which influenced our approach to user registration and authentication.
* Publisher: John Wiley & Sons
* Year: 2019

Inventory Management: Principles and Strategies for the Efficient Flow of Goods

* Author: Steven M. Bragg
* Summary: The strategies outlined in this book inspired the design of our admin controls for inventory and pricing management.
* Publisher: Accounting Tools
* Year: 2021