**A PROJECT TITLE**

**ON**

**E-Comm Velocity  
   ~Accelerating Commerce with Live Inventory and Vendor Synergy.**

***Insem-End project submitted in partial fulfilment of the requirements for the***

***Course FULL STACK APPLICATION DEVELOPOMENT of the degree of***

**BACHELOR OF TECHNOLOGY**

**IN**

**Computer Science and Engineering**

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**BY**

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**DEPARTMENT OF COMPUTER SCIECNCE AND ENGINEERING**

**Project Title:** **E-Comm Velocity  
                 ~Accelerating Commerce with Live Inventory and Vendor Synergy.**

**Project Team No.:**

1. **Abstract:**

"E-Comm Velocity" is a cutting-edge solution aimed at optimizing the e-commerce experience through real-time inventory tracking and enhanced vendor collaboration. As the demand for multi-vendor e-commerce platforms grows, ensuring accurate product availability and seamless communication between vendors becomes increasingly crucial. This system addresses these needs by providing real-time inventory synchronization, preventing stockouts, and maintaining an up-to-date product catalog. Through modern technologies such as WebSockets and Firebase, "E-Comm Velocity" ensures that product availability is updated instantly across all platforms, enhancing both vendor efficiency and customer satisfaction.

The platform also focuses on fostering vendor synergy by providing an easy-to-use dashboard where vendors can manage inventory, track sales, and communicate effectively with customers. This enables vendors to automate inventory updates, manage stock levels, and receive real-time notifications on inventory changes. With built-in sales analytics and inventory forecasting tools, vendors can better align their stock with customer demand.

In addition, "E-Comm Velocity" delivers a seamless user experience, with easy navigation, real-time updates, and efficient order processing. The combination of real-time tracking, vendor collaboration, and user-focused design creates a solution that not only accelerates commerce but also helps businesses scale efficiently while improving overall operational efficiency.

By combining the power of technology with efficient business processes, "E-Comm Velocity" provides a robust e-commerce platform designed to meet the demands of a rapidly evolving market.

1. **INTRODUCTION:**

As e-commerce grows, managing inventory on multi-vendor platforms becomes challenging, with issues like stock mismatches and delayed updates. "E-Comm Velocity" addresses these problems by offering real-time inventory tracking, ensuring that customers always see accurate product availability. This helps prevent issues like selling out-of-stock items.

The platform also simplifies vendor management by providing tools to track sales, analyze inventory, and forecast stock needs. This helps vendors meet customer demand more efficiently.

Overall, "E-Comm Velocity" offers a scalable, seamless solution for vendors and customers, ensuring accurate inventory management and smooth order processing.

1. **SOFTWARE REQUIREMENTS:**
   * React.js (for building dynamic, responsive user interfaces)
   * HTML, CSS (for layout and styling)
   * Spring Boot (used for building the frontend and handling dynamic content)

**Course Coordinator Course Instructor CSE , Coordinator**