**1. Contribution to Organizational Objectives**

The primary goal of this project is to provide a user-friendly application that facilitates safe, efficient, and reliable purchasing from the organization’s inventory, enhancing overall customer satisfaction. Through a graphical user interface (GUI), customers will have a smooth experience interacting with the system, from browsing products to making purchases. Internally, the system will empower staff with tools to manage inventory, allowing for regular updates and streamlined workflows that align with organizational objectives of improving service efficiency and user satisfaction. This project directly supports these goals by enhancing the experience for both customers and staff.

**2. Technical Feasibility**

This project is technically feasible, as we are using current, accessible technology suited to our skills and project scope. Python, selected for its versatility and extensive library support, will be our primary language. We plan to incorporate DevOps practices, with a focus on Continuous Integration, to facilitate smooth development and timely updates. Git, GitHub, Trello, and Discord will form our core workflow tools, enabling version control, task management, and seamless team communication. These technologies are cost-effective and widely supported, making them ideal for a classroom project environment. Our team has assessed and confirmed that we have the necessary skills and resources to work with these technologies effectively within our timeline.

**3. Legal Feasibility**

We have evaluated the project from a legal perspective, and all components comply with necessary regulations and standards. This includes our approach to data handling, which will prioritize user privacy and security within the application. Since this is a classroom project, there are no specific legal constraints beyond standard data protection practices, which we will emulate. All software tools being utilized are open-source or freely available, eliminating licensing concerns. Thus, the project is legally feasible, with no foreseeable risks regarding compliance or licensing.

**4. Operational Feasibility**

The project is operationally feasible, meaning it is practical and manageable given our available resources and timeline. Each team member has clearly defined roles and responsibilities, allowing us to stay organized and aligned with our objectives. We are scheduling regular check-ins to monitor progress and address any issues promptly. As the application will also feature a user-friendly interface for internal staff, it will be easy to integrate into a typical workflow, with minimal training required. Any operational challenges, such as adjusting to the new system, are accounted for in our project plan, making it achievable within the project’s operational constraints.

**5. Feasibility Within Schedule and Budget**

Our project timeline is designed to be completed within the semester, and we have established a clear, phased approach to development. Key functionalities are prioritized, including inventory browsing, product details, and purchasing options. Secondary features, such as advanced reporting or additional GUI enhancements, will be considered if time allows.

**Cost-Benefit Analysis**

Since this is a classroom project, we are working with an assumed budget that emphasizes cost-efficiency. By using open-source software and free tools, we are keeping all project costs within this "pretend" budget. The project’s value lies in its potential to streamline operations, improve customer satisfaction, and increase efficiency. This operational value justifies any hypothetical investment by highlighting long-term benefits such as better customer interactions and more efficient inventory management. Overall, the cost-benefit ratio is favorable, with significant value provided relative to the minimal hypothetical cost.

**6. Integration Capability**

Our application is being designed with future scalability and integration in mind. Python’s versatility, combined with our team’s commitment to maintaining thorough documentation, will ensure easy adaptability for potential integration with other systems. We are using modular code structures, comprehensive notes, and version-controlled repositories to make future updates seamless. This approach will help the organization scale the system and adapt to evolving needs without requiring extensive rework or additional resources.

**7. Feasibility Within a Reasonable Period of Time**

Our project plan is structured to ensure completion within the semester timeline. By using agile practices and breaking down tasks into manageable components, we will deliver a functional product on schedule. The inclusion of regular team meetings and a task management system through Trello will help us stay on track. Potential delays due to unforeseen challenges are accounted for in our timeline, allowing for flexibility if adjustments are needed. The project scope is realistic, and we are confident in our ability to deliver it within a reasonable period.

**8. Economic Feasibility**

While this is a class project with no real financial costs, we are approaching it as if there were a budget to consider. The project is economically feasible within the confines of our "pretend" budget, which is maintained by using free resources like open-source libraries, GitHub for version control, and Trello for task management. By minimizing hypothetical costs and maximizing functionality, we demonstrate an efficient use of resources. The benefits of this project, in terms of improved customer satisfaction and operational efficiency, outweigh the assumed costs, making it a sound investment in a real-world scenario. Hypothetically, projected profitability would stem from improved customer retention and potentially increased sales due to a better purchasing experience.

**9. Ability to Meet Requirements Within Time Constraints**

After analyzing the project requirements and timeline, we believe that we can implement the primary functionalities within the semester. Our focus will be on core features like the inventory display, browsing capabilities, and purchase processing. If time constraints become a concern, some non-essential features, such as complex data analytics or additional design enhancements, may be postponed to a later phase or treated as future improvements. With our prioritized approach, we are confident in our ability to meet the core requirements within the designated timeframe, ensuring a high-quality product by the end of the semester.