iGo The future of Public Transportation Ticketing

SOEN 6461 – TEAM K

Devanshi Patel	Hetul Patel	Jay Patel	Juhi Patel	Krishna Patel	Mahavir Patel
40172139	40225667	40197003	40190446	40206701	40198619

About iGO

iGO is a software engineering project goal of which is to is to produce a collection of related artifacts for the issue at hand as well as the domain of the software solution for a useable, secure, maintainable, and (environmentally) sustainable TVM (Ticket Vending Machine)

Collaboration Patterns

➔ Our project utilized collaboration patterns such as task assignment, communication, and peer review to promote knowledge sharing and conflict resolution.

➔ To optimize our workflow and improved team dynamics, we made used of collaborations tools like Github. We made sure that we have enough reading material and we documented everything simultaneously to avoid any confusion.

➔ Peer review aided us for quality control and feedback, helping to identify and correct errors or inconsistencies in project deliverables.

Tools/ Technologies Used

Reuse Potential

➔ IGO software is highly adaptable as well as scalable. More and more services and be added to the software even changes can be made to the existing services.

➔ Additionally, the software be scaled to implement movie ticketing system, event ticketing system, parking ticketing system etc.

Conclusion

➔ iGo Ticket Vending Machine software focuses on user centric ticketing experience through its design, user interface, integration with other systems and scalable development. The user interface is easy to understand and navigate, making it user-friendly and hassle-free for commuters to purchase tickets.

➔ The software has been meticulously developed through extensive research, resulting in a robust and scalable solution.

➔ The software's resilience, adaptability, and performance make it well-suited for current and future demands, ensuring that it can effectively support the intended use cases and deliver long-term value to its users.

Results

The iGo ticket vending machine serves as a valuable model for future ticket vending machines to follow, with its accessibility features and simple UI, to enhance the overall transportation experience for commuters.

Lessons Learnt

➔ Thoughtful user interface design is paramount, as it can significantly impact the overall user experience, making it intuitive, efficient, and enjoyable.

➔ Prioritizing user-centric design is essential, ensuring that the product is tailored to meet the needs and preferences of the users.

➔ Scalability should be considered in the design, allowing for expansion or customization to meet future needs and requirements.

➔ Testing and validation should be integral to the design process, ensuring that the product meets quality standards and performs as intended.

➔ Innovation and adaptability should be embraced, keeping up with evolving technologies and user expectations to ensure the product remains relevant and effective.

➔ Accessibility should be a fundamental consideration, ensuring that the product is designed to be inclusive and usable by all, including people with disabilities or special needs.

➔ Security should be given top priority, implementing robust measures to protect user data and ensure secure transactions.

Critical Decisions

Critical decisions were made to ensure the system is efficient, user-friendly, secure, and compliant with industry standards. Some of these decisions include:
➔ Deciding the UI/UX of iGO.
➔ Deciding the overall user flow, warning messages and security constraints of the application.
➔ Deciding the architecture of iGO.
➔ Deciding on tools and technologies to be used.

Limitations

The iGo ticketing system software may have some limitations, including

➔ Lack of Advanced Features such as real-time reporting or customization options, limiting its functionality and adaptability to changing business requirements.

➔ It has limited security measures, such as weak authentication or encryption mechanisms, which can make it vulnerable to data breaches, fraud, or unauthorized access, compromising the integrity and confidentiality of user data.

➔ It is not easily integratable with other systems or third-party services, making it difficult to create seamless end-to-end ticketing experiences or share data across platforms.