



INDUSTRIAL TRAINING PRESENTATION

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Willowglen (Malaysia) Sdn. Bhd



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WILLOWGLEN

Willowglen (Malaysia) Sdn. Bhd

About Us

Established in 1972, Willowglen has been providing technological solutions for an ever-expanding range of infrastructure, businesses, residential, commercial, and industrial needs. Our pursuit for innovation has led us to pioneer the highly sophisticated remote monitoring and control system in the region.

Industry

- Water & Water waste
- Oil & Gas
- Electrical, Power & Green Energy
- Commercial & Residential
- Transportation

TRAINING OBJECTIVES



Fostering Creative Problem-Solving

Encourage innovative thinking to address and resolve real-world challenges.



Adapting to a Professional Environment

Develop skills to integrate into a real-life working environment effectively.



Applying and Expanding Knowledge

Utilize previously acquired knowledge to complete tasks and projects while learning new concepts in software engineering.



Understanding Organizational Workflow

Gain a comprehensive understanding of the workflow and operations of Willowglen (Malaysia) Sdn. Bhd.

PROJECT OBJECTIVES

Project Smart Business City aims to integrate multiple infrastructure systems such as fire, lighting, HVAC (heating, ventilation, and air conditioning), surveillance, flood, elevator, security, electrical, radio communication, into a unified platform for efficient operations.

Centralization

Creating a single interface for accessing and controlling all equipment by integrating several monitoring and control systems onto a single platform.

Monitoring

Providing precise and ongoing real-time monitoring of environmental conditions and equipment performance, including data logging and anomaly warning systems.



Automation

Implementing automation to decrease manual involvement, increase operational effectiveness, and improve system response to predetermined triggers or real-time situations.

Optimization

Improving data flow, cutting down on redundancies, and allowing predictive maintenance features to increase the system's dependability and efficiency.

System Navigation Development

- Enhanced system navigation and usability with Zenon software.
- Developed functions and scripts for seamless transitions and optimized workflows.
- Managed multi-monitor interfaces for efficient task handling.

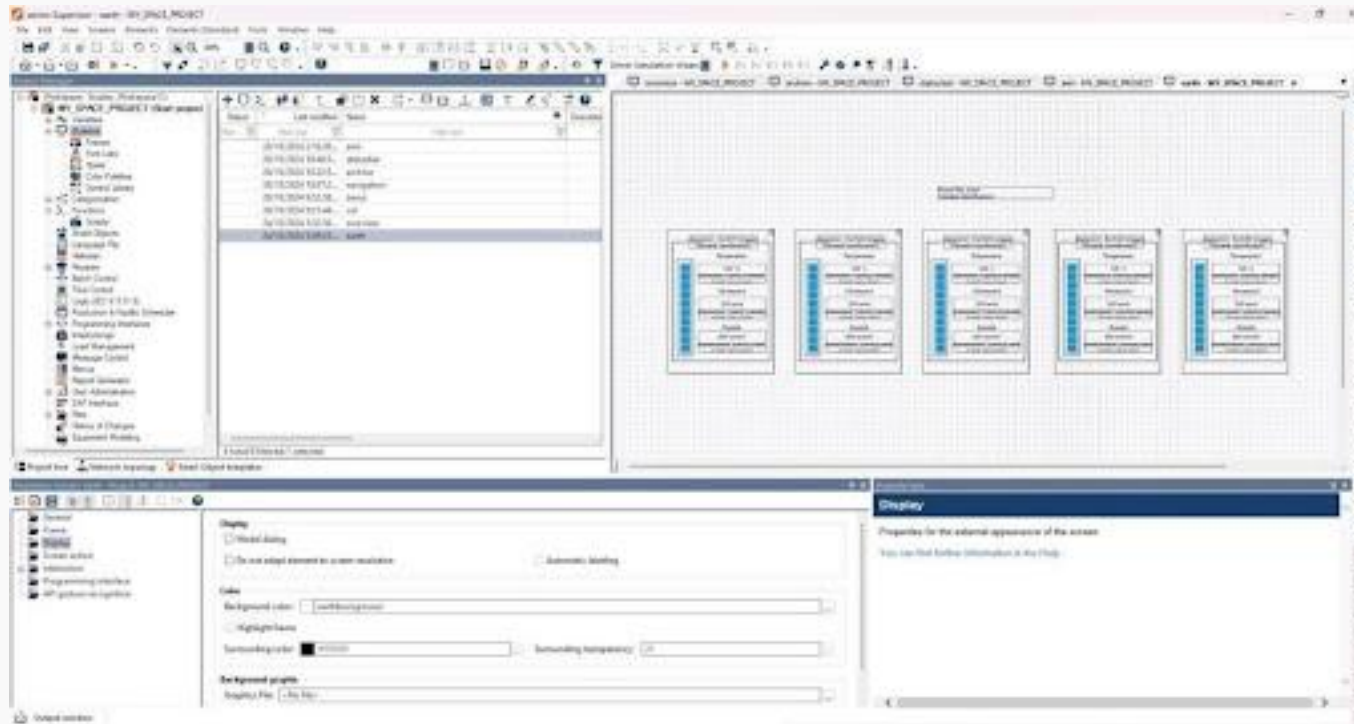


Fig 01: Zenon Dashboard

User Manual Development

- Designed user manuals for the system with HTML and CSS.
- Created user-friendly pages for management systems in VS Code.
- Edited photos and optimized layouts for clarity and navigation.
- Resolved design challenges to deliver polished manuals.

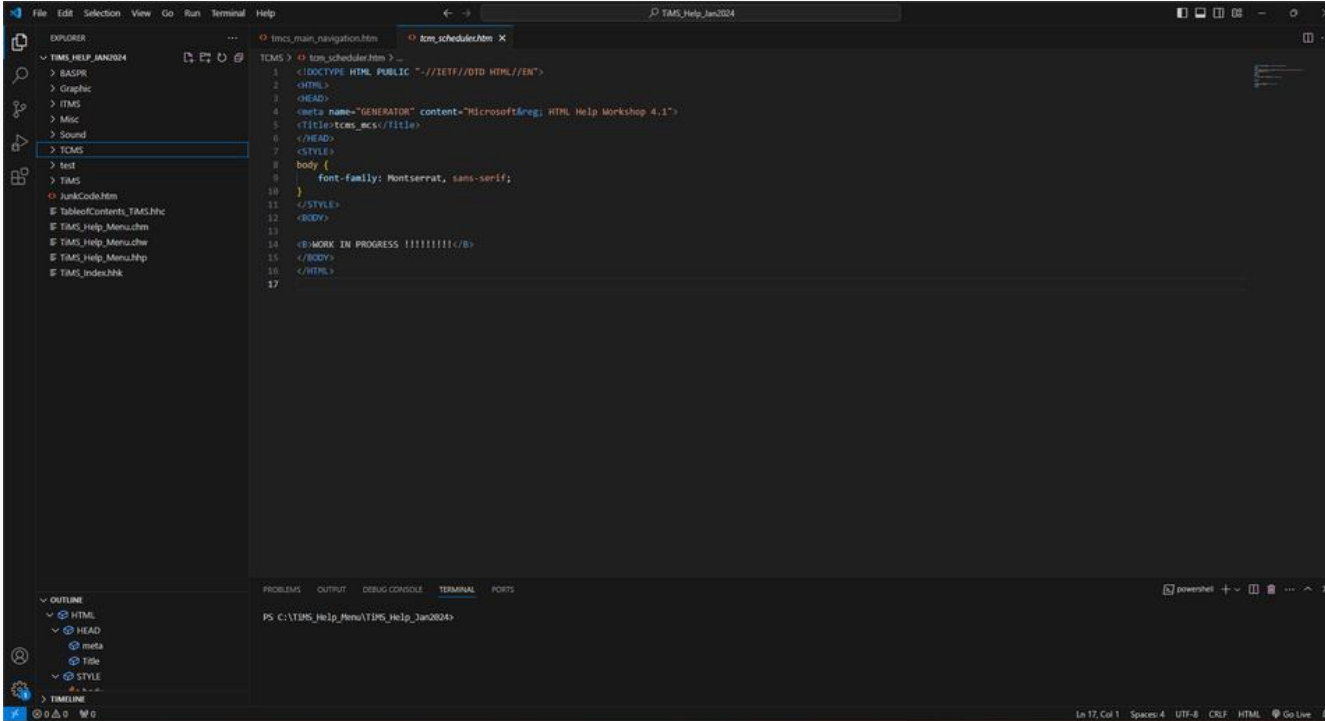


Fig 02: VS CODE

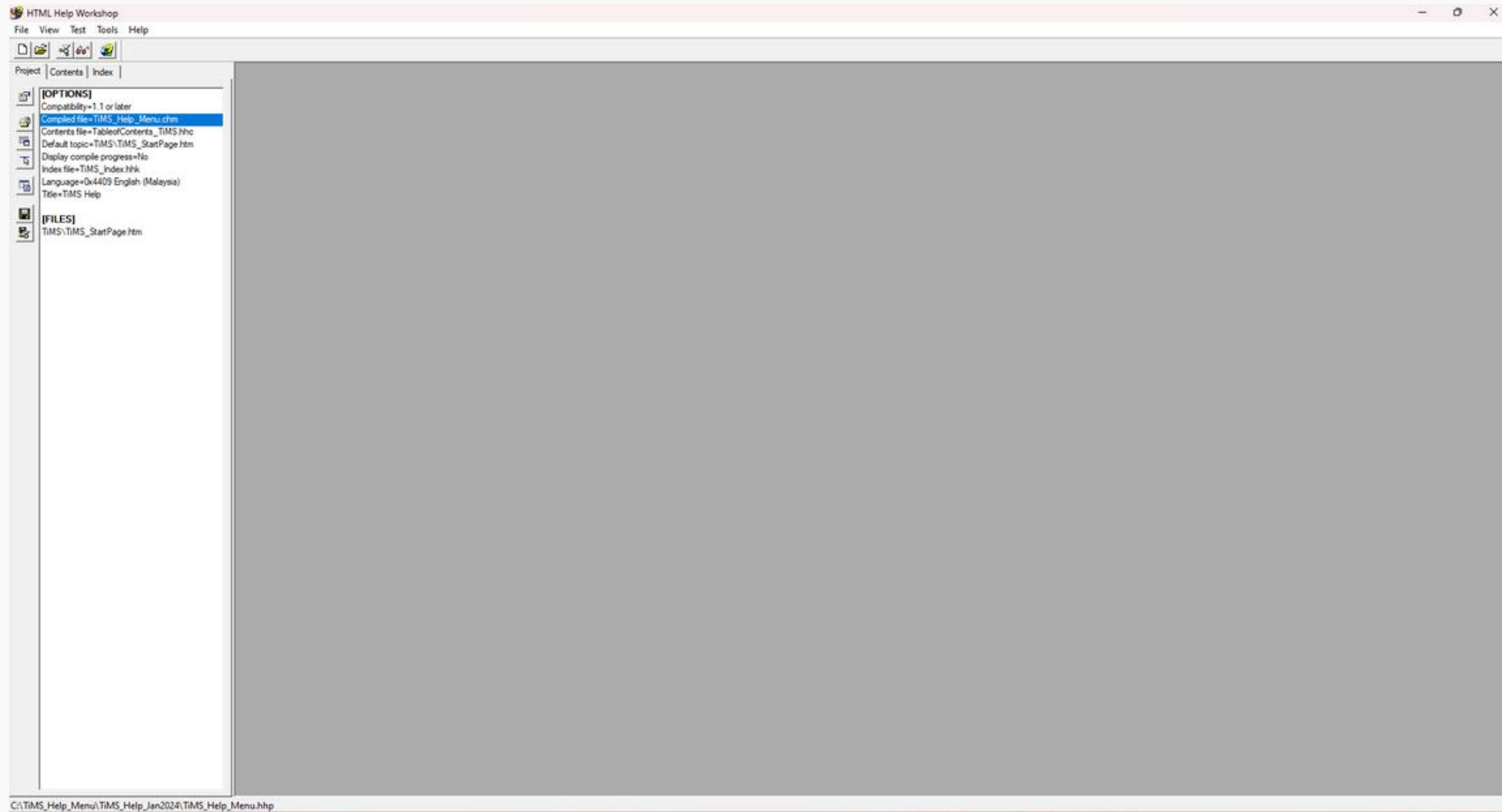


Fig 03: HTML Help
WorkShop

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Dashboard and Screen Design

- Designed screens for Building Management, Public Realms, Tunnel, and Wastewater Management Systems, ensuring functionality and usability.
- Structured tables within screens for organized data and consistent layouts.
- Assigned variables to enhance dynamic data handling and interactivity across systems.

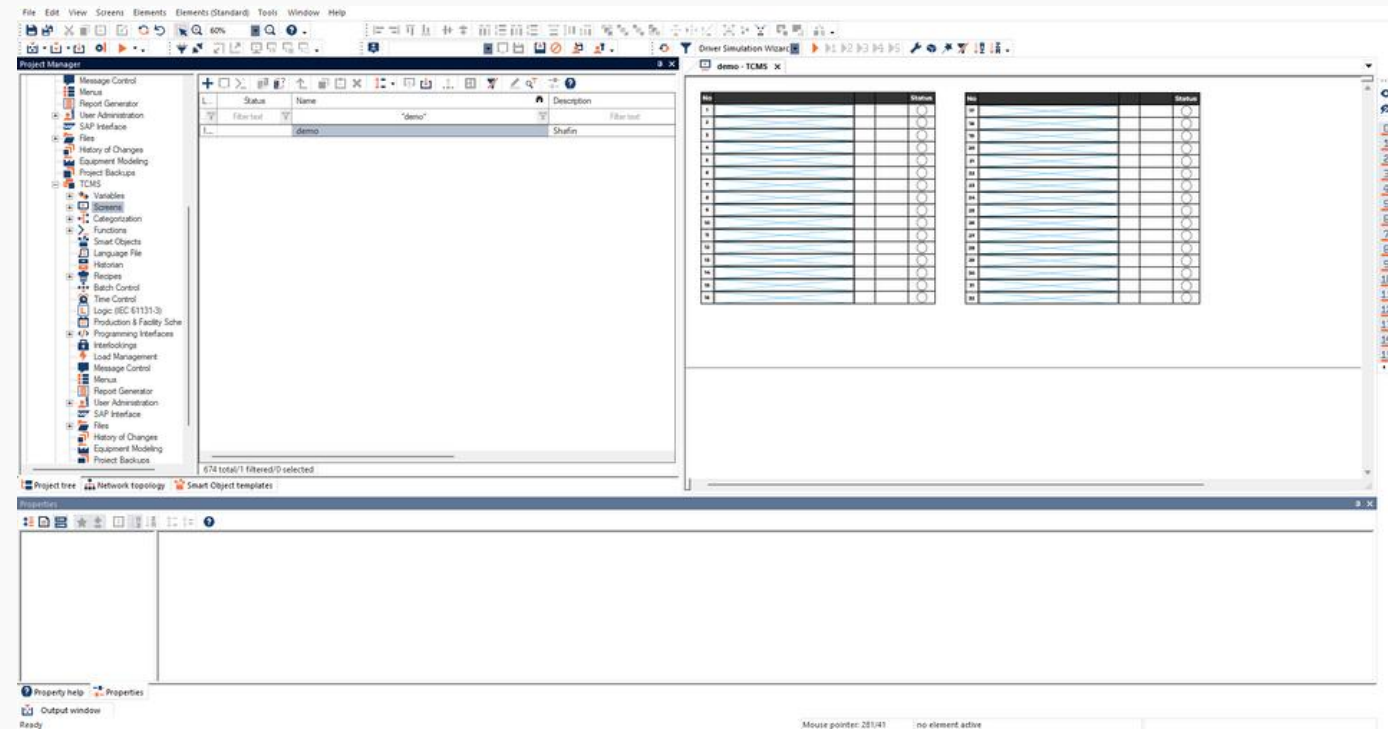


Fig 04: Zenon Engineering Studio

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System Floor Maps Design

- Designed layouts for Building, Public Realm, and Tunnel Management Systems in Tinkercad.
- Ensured precision and usability for efficient spatial planning.
- Integrated maps with dashboards and manuals for better usability and documentation.

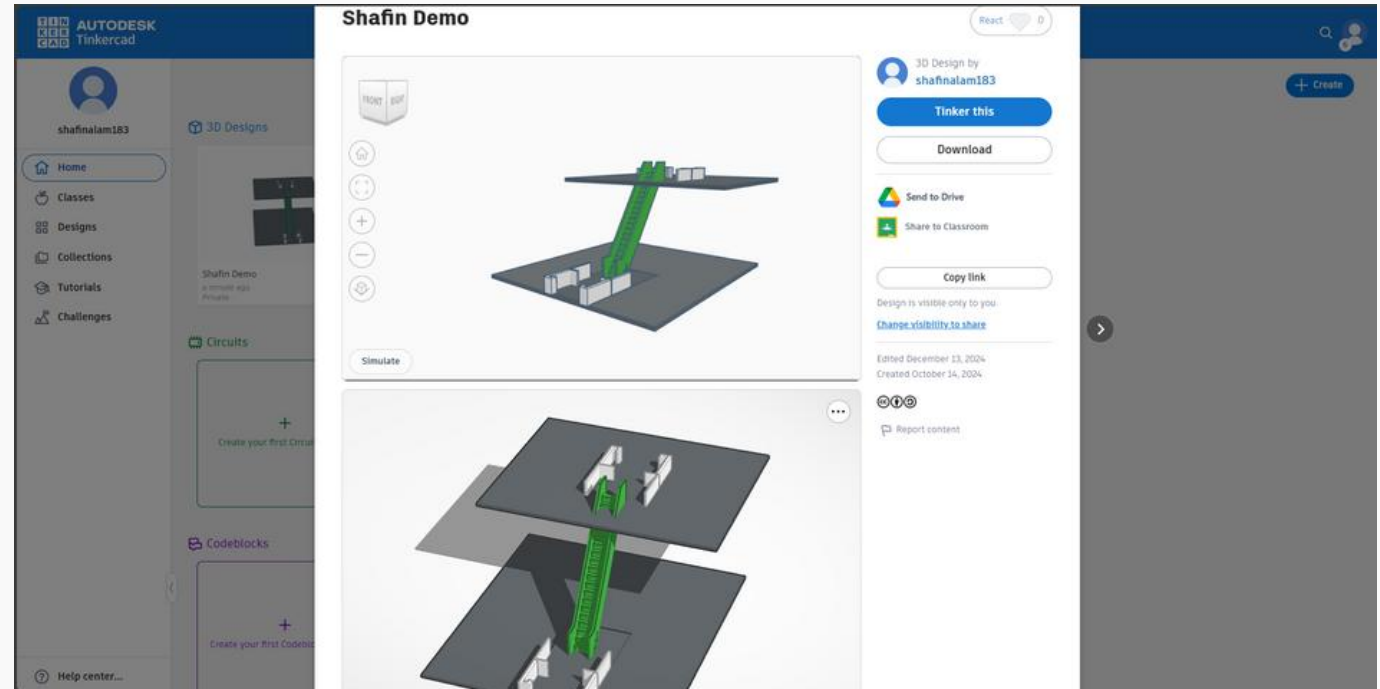
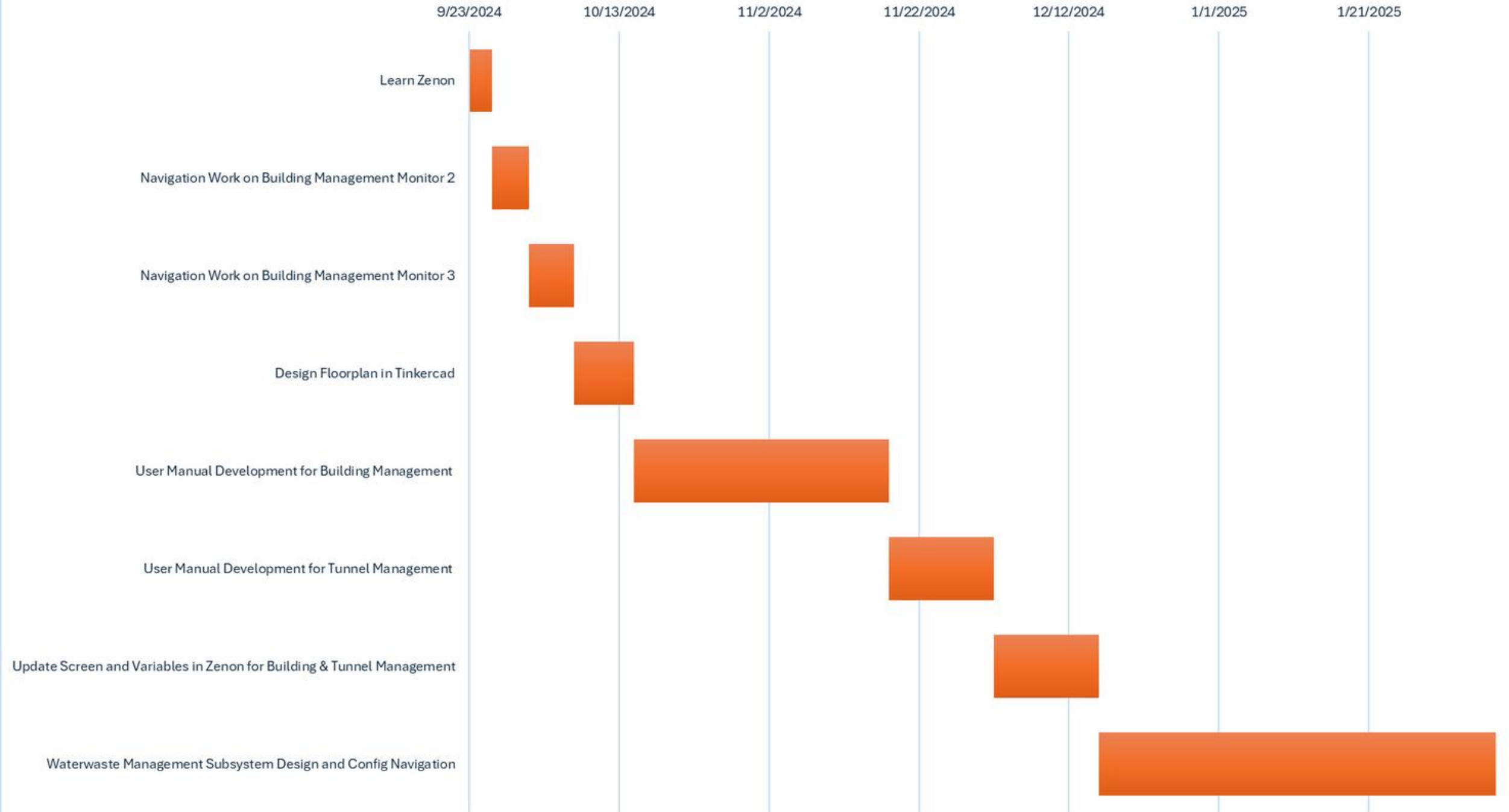


Fig 05: Tinkercad Dashboard

Internship Period Gantt Chart



Knowledge Gained

- **Proficiency in Zenon Software:** Learned to develop system navigation functions, script workflows, and manage extended interfaces for seamless operations.
- **HTML & CSS Expertise:** Gained skills in creating responsive layouts and user manuals using Visual Studio Code and Microsoft HTML Workshop.
- **Tinkercad Design Skills:** Mastered the creation of detailed digital floor maps for Building Management, Public Realms, and Tunnel Management Systems.
- **Dashboard and Screen Design:** Designed interactive dashboards with dynamic data tables, improving usability and real-time data handling.
- **Team Collaboration:** Improved communication and teamwork skills by working closely with supervisors, colleagues, and clients to meet project goals.
- **Adaptability:** Quickly adjusted to new tools, platforms, and challenges while maintaining high performance and meeting project objectives.
- **Time Management:** Successfully balanced multiple tasks and projects within tight deadlines, ensuring timely delivery of high-quality results.
- **Professional and Technical Growth:** Enhanced skills in project planning, creative problem-solving, and balancing multiple tasks within deadlines.

Issue Faced

- **Learning Curve for New Tools:** Struggled with understanding and utilizing HTML Workshop, Zenon software, and Tinkercad effectively.
- **System Navigation Complexity:** Faced challenges in scripting and developing seamless transitions between subsystems and panels in Zenon.
- **Precision in Floor Map Designs:** Translating paper-based designs into accurate and functional digital maps required significant time and practice.

Insights from Industrial Training

- Gained proficiency in tools like Zenon, Tinkercad, and HTML Workshop for system design and automation.
- Learned to centralize diverse systems to enhance operational efficiency and sustainability.
- Developed resilience and analytical thinking by overcoming technical challenges and learning new tools.
- Improved teamwork and professional communication under expert mentorship.
- Designed scalable, user-friendly systems emphasizing functionality and future readiness.

Personal Growth

- Developed technical expertise in advanced tools like Zenon, Tinkercad, and HTML Workshop, enhancing my design and programming skills.
- Improved problem-solving abilities by tackling complex tasks and overcoming challenges in system integration and navigation development.
- Gained confidence in communication and teamwork through collaboration with mentors and colleagues on various project components.
- Strengthened adaptability and learning agility by quickly mastering new tools and scripting languages necessary for the project.
- Gained a deeper understanding of smart city technologies and automation, providing clarity on career direction and industry trends.



THANK YOU

In the Name of God for
Mankind