**LESSONS LEARNT**

1. **Importance of Clear Communication with Stakeholders:** Throughout the project, regular and clear communication with the client, Floor Coverings International, was vital to ensure that the system met their expectations and addressed their specific needs. Frequent meetings and updates allowed us to clarify requirements and make necessary adjustments. Lack of detailed initial communication might have led to misunderstanding of the core issues, leading to inefficiencies.

2. **Scalability Challenges:** While designing the system, we prioritized scalability, but during implementation, we realized the need for more robust database solutions to handle potential future growth. The initial system architecture didn't fully account for the potential volume of transactions and user load, which required reworking certain components to ensure the system could scale effectively.

3. **Time Management and Task Distribution:** Balancing the tasks and dividing the work among team members was essential. With everybody's busy schedule we learned to support each other where the other is lagging and as the project progressed, we improved our task delegation through better planning and organization, allowing the team to work more efficiently and complete the project on time.

4. **Continuous Improvement and Agile Practices:** The use of **agile practices** such as sprint planning, regular retrospectives, and progress tracking helped maintain the project's momentum and kept the team aligned. We learned that while it's important to focus on the big picture, consistent smaller improvements and adjustments were key to the project's success.

5. **Technology Selection:** Choosing the right technologies for this project was another crucial learning point. Initially, we considered several different tech stacks like mySQL, Python but after discussing scalability, ease of integration, and familiarity with the technologies, we decided on tools that better matched our project's needs. The decision to use **MVC architecture** and **barcode scanning** technology paid off, as it improved both performance and user experience.

6. **Team Collaboration and Conflict Resolution:** Collaboration within the team was generally effective, but disagreements occasionally arose regarding the best approaches to certain challenges. One key takeaway was the importance of having a well-defined conflict resolution process. By respecting each team member's input and focusing on the project's goals, we were able to resolve disagreements constructively and move forward more efficiently.