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CS 347-D Group 15

Challenges and Excellences

Given the amount of time and effort the IoT HTR Software Development project took, various challenges accompanied by excellences shaped the final deliverable to be a final working product. A major challenge from the beginning was the environment in which the project was developed. Being developed exclusively online, challenges ranging from scheduling to communication errors were common due to the lack of a fluid and productive environment. Like most development cycles, requirements volatility alongside unnecessary complexity in code development revealed the need to simplify or remove some requirements as they were overly complex for the scope of the project. Customer demands also sparked the need for changes, with the introduction of a new feature at the tail end of the development cycle.

Along with these challenges were some successes, including the team's time management, which was always ahead or on schedule to complete sections regardless of scheduling conflicts. Given the time allotted for documentation, the team spent many hours to create an extensive document which greatly aided the transition into code production. The extensive documentation included use cases along with models, diagrams, and descriptive requirements which created a very effective and thorough foundation for code production, testing, and deployment. The constant feedback from shareholders for our own project and others also greatly contributed to our understanding of the project at hand and what was needed from the team.

After completion of this project, the team has reflected on these challenges and successes to better deliver the next version of the product faster and more efficiently. One of the major hindrances was the lack of physical meeting, which the team believes would have cut down on communication errors and confusion drastically. Along with physical meetings, a more extensive meeting schedule and timeline at the beginning of the project to have more frequent and preemptive communication with each other, as opposed to our meeting when needed. Lastly, a better focus on the requirements mandated by the shareholders, as during code production some

time was lost due to the production and desertion of unnecessary features and requirements. Overall, the team believes they had a relatively average development cycle accompanied with common pitfalls, largely due to the development environment.