

Assignment #4
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Empathetic Design Methodologies

When designing a product it is critical that the companies have a method in place which takes into account their users. A critical part of the process is feedback from their users to ensure that the final product is designed to both be functional and user friendly. When designing with empathy it is important to ensure that the needs of the user are taken into account before the product is designed. Slide 4 in lecture 3 demonstrates how a project can go wrong if there is a lack of design process and methodologies.

Companies have integrated design methods in their process from idea to product through the use of requirement gathering, prototyping, etc. In the software industry recently there has been a big push for agile development, something I've had the chance to use professionally. The agile development cycle really enables a developer to build the product with both the client and the product in mind. Agile development constantly has the team reviewing the project and the goals to ensure that the criteria are being met.

One example from the industry where I learned about the design process of a product used by millions of users from all around the world was my time interning for GitHub. Since I was only there for the summer the design methodology used was rapid prototyping. When I started my internship the requirements for the project were already gathered and given to me. This enabled me to begin rapid prototyping testing multiple ideas. The goal of the project was to optimize for speed while maintaining accuracy, so plenty of benchmarks were created. Ultimately there were 2 prototypes which passed all of the benchmarks however we opted to use the more user-friendly solution. The rapid prototyping enabled my team and the clients (external companies who use GitHub) to see how multiple implementations may work without requiring a complete project. The goal was to find the algorithm which best suited the needs and rapid prototyping gave GitHub just that. I really enjoyed being able to test many versions constantly, it made it really easy to determine which route was the right way to go. Had we not rapid prototyped in this case and only built out one giant solution then it may have been slower or more inaccurate thus not passing the benchmarks with the same scores as the result we got from rapid prototyping.

Another example of a company which I had used agile development at is the Ottawa Carleton District Schoolboard. While working there I was developing their marks management system. As the developer I loved to code however I had no clue what the teachers were expecting. Since the project was being developed from scratch there was plenty of opportunity for my team to gather the requirements of the project and include the relevant people to ensure that it was designed with the end user in mind. At the beginning of my work term I met with

a few teachers to understand how this application will help them and what they expect to be able to do. Then daily I met with my team to ensure project goals were being met and every 2 weeks we would review the progress and determine the next set of goals. Then once a month we would meet with the client and provide progress updates on the development to ensure we were on track with their expectations. Using the Agile development methodology save plenty of time because as soon as something wasn't how the client expected we were able to change it with ease. The agile development method really kept the client in mind. Using metrics we were able to determine that this completely optional application was adopted by over 90% of the teachers in the OCDSB. I believe that these metrics are proof that the agile design process worked.

I believe that these two design methodologies have proven to be extremely effective in in professional experience. Although both of them are quite different at the end of they day they both achieve the task of gathering requirements, building criteria, creating benchmarks & metrics which ultimately lead to a decent first prototype. My experience during my internships