Project Management

This section of the report will cover the project management tools and frameworks that can be used to manage this project. This shall give the reader an insight into how professionally we tried to manage our work and more improtantly, will provide a framework for future developers of this product that will bring the prototype to a real final product. We will discuss the two most commonly used project management methodologies in IT projects, which are the traditional and agile approach. For each of the possibilities, we will discuss in detail the benefits and downfalls in general and in the scope of our project, and we will justify our choice.

The traditional method is considered linear because stages of the projects are preplanned, and the requirements are fixed at the beginning of the project. It does not allow for much flexibility and is not well-suited for projects that might experience a lot of technical uncertainty. It is not well suited for projects that need to include the stakeholder actively into the backstage of the project, and projects that are expected to require flexibility, which are the majority of the projects of start-up companies. However, the benefits of the traditional project management are associated with the fact that it takes a sequential approach to managing projects in which everything is preplanned. This allows the team to work with less guidance, which in turn allows the project manager to focus on various tasks since the project has a clear direction from the very beginning. However, the traditional development method requires much heavier documentation and will not provide that much implementation at the beginning of the project. This comes from the fact that the traditional development’s fundamental assumption is that systems are fully specifiable, predictable, and are built through extensive planning – as mentioned by Serrador, P., and Pinto, J. (2015) in their paper “Does Agile work? A quantitative analysis of agile project success. International Journal of Project Management” in the section about main differences between traditional and agile development after Dyba and Dingsoyr (2008). We can summarize the points of the traditional development by characterizing it as an early design that has a fixed project scope, low customer interaction and less flexibility. Early design can be beneficial for this project, but the project really requires a more flexible approach because things are constantly changing, and the development is time-bound, which means that spending a lot of time and budget purely for designing and documentation might not be the most ideal approach to satisfy the stakeholders.

The agile development approach is known to be much more flexible. What’s more, it includes the stakeholder actively in the backstage of the progress of the project in order to assure the highest customer satisfaction by providing the customer with demo products at every stage which make the progress clear to the stakeholders. Serrador, P., and Pinto, J. state in their paper from 2015 that in agile development high-quality adaptive software is developed by small teams using the principles of continuous design improvement and testing based on rapid feedback and change. This summarizes the main points and advantages of the agile development. The projects of agile development include actively the customer by constantly asking for feedback. Its main characteristic is the continuous development, bound by constant change and adaptation. This implies that the agile development puts working software, captivity and customer feedback over documentation, extensive initial planning, and project manager flexibility. Agile Development has shown that small focused teams perform better than large unorganized teams with complex cultural and skill backgrounds. The last two statements clear up the reasons why the results of Serrador, P., and Pinto, J. suggest that agile methodology is correlated with higher reported success for overall project success, efficiency, and stakeholder success in small to medium-sized companies. The results of that study make us believe that agile development might be better suited for our project than the traditional approach. What’s more, the results of that study show that the healthcare sector has shown to have benefited more from agile methodologies. Therefore, because of the aforementioned reasons, we believe that agile will be better suited for the development of this product.

Trello

For professionally managing our tasks, we used and recommend Trello. It is an easy to use tool that helps with task division and Scrum (agile development). We divided and assigned our tasks to people that were most fit based on background and interest, everybody then took initiative into working on the specific tasks and moving them from to be done to in progress, then to review and finally, done.

