# Methodology

The famous agile methodologies are: scrum, kanban and extreme programming. Scrum is an approach to software development that uses iterative and incremental procedures to streamline software development. In project management, the scrum methodology indicates teamwork. Scrum provides continual feedback and adaptability, and the developers are free to concentrate on using one or more features per a sprint, which is often a month or fewer. This is one of the reasons why I had considered scrum (S, 2023).

Extreme Programming (XP) is an agile software development approach that attempts to deliver better products while improving the development team's overall productivity. The fundamental practices of Extreme Programming are review of code, testing, integration testing, incremental development, design, and simplicity. With an eye on quick, progressive development and deployment, XP supports close collaboration between the development team, the client, and partners (geeksforgeeks, 2023).

Scrum and kanban are quite similar but scrum basically focus on teamwork and this project is an individual task. The scrum team basically has a scrum master that leads the scrum process, but as mentioned before this is an individual task. At the same time, extreme programming needs a lot of customer engagement. It’s not that this project doesn’t have customer involvement, it does have customer involvement as updates are going to be feedback-driven. Customers are the crucial part of this methodology and they involve in the development process by writing user experiences, offering ongoing feedback, and making all project-related business choices. In XP, the customers are also in charge of testing and approval.

Kanban is an agile software development methodology that is widely used. It is essentially an indicator that directs the movement of parts in a 'pull' production system established as part of the Toyota Production System. Kanban is about visualizing existing workflows as stages. Kanban's major goal is to identify and remove any possible problems in your process, allowing work to move smoothly and at the ideal pace while assuring affordability. The majority of online Kanban systems give monitoring and output stats, which allows users to quickly discover issue areas. Kanban improves progress, decreases process time, boosts customer value, and promotes consistency and these all aspects are critical in today's business (Bhaskar S, 2023).

Future work can be easily forecasted when using kanban approach. Kanban employs a work in progress limit to reduce tasks and items while preventing overloading. It also fosters a consistent and seamless pace of work. When one job is completed, the next highest priority task is added to the process. As a result, kanban approach is the best choice for the project.