Software Engineering & Agile

# Task 1

Task 1 has been completed in the readme document available in the GitHub repository.

<https://github.com/Yman01/ITHelpDesk_Assignment>

# Task 2

The application I created was a generic IT ticket system. The core idea of it is a User would submit a ticket with their IT problem and it will then be reviewed by a support team.

The agile framework I used for my application was Kanban. Kanban is a versatile framework that is very good for small teams and individuals. It creates a continuous flow of work and using Kanban boards like Trello allows for virtualisation of the project and limit what is being worked on at any one time. It also has no required roles which is perfect for me as I am the sole contributor to the project, I have to plan, design, develop and test the application within a very short time.

The reason I chose not to use a framework like scrum is because it is not applicable to a one-person team. I cannot be both a developer and a scrum master it would defeat the point of it. All other frameworks have the same problem, they all require some sort of team. The limitation of this project forces me into Kanban as it is the only viable option.

For designing the application, I used PowerPoint to illustrate the flow of the application. The PowerPoint is split into 4 sections showing the signup/sign in pages, the home screen, Ticket create and view pages and the account details page. The GitHub repository includes the PowerPoint showing this. I created a Trello board with the core requirements of the application and used it to stay on track whilst developing.

<https://trello.com/invite/b/wialYTb9/ca3dcc647ba253c7236c01e5e47a7004/it-helpdesk>

For the tools regarding the application itself, the language I used was Python, the framework was Django, I used MySQL in a docker container whilst developing and I used html and CSS. I was locked into python due to the requirements of the assignment, I personally found this to be quite troublesome as python is not a web application language, I therefore used Django as it is the most used web application framework for Python and had a lot of documentation which I frequently used. I used MySQL as my database, and I had it in a docker container as it was much easier to setup and use for development and testing.

Task 3

The area I work in is an infrastructure team. We automate, fix, and upgrade the infrastructure when necessary. The agile framework we use is Kanban. We have a program called Jira which helps us plan, assign, track, report, and manage work. It similar to Trello with boards but instead its just we get ticket we fix problem and done. When we have bigger projects like expansion of the infrastructure, we structure the requirements and we create a board to help us keep track of the project progress.