**Comparison between Software Platforms and Frameworks**

There are many software platform and frameworks to choose for the client’s solution but it all depends on the software factors, advantages and disadvantages. The main objective is to have a website that can have a login system and a booking system for the client to use. With this requirement, we need to be open to many languages that support programming and web frameworks. The platforms that will be compared will be: Python Django and C# ASP.NET. Another factor to consider is the database programs as well where it has to be industry standard, which means SQLite wasn’t an option. So, the programs to compare were Oracle SQL and MySQL.

**Comparison between the platforms and database:**

Initially before the sprint started, 2 platforms were taken in to consideration to use for the project which was ASP.Net(C#) and Django(Python). ASP.Net was an advantage because when creating the project through Visual Studio, a template is given which has a login and sign up functionality which was exactly what was needed to build the project and can be further expanded to the client’s requirements. In Django, it was discovered that using this method would involve creating webpages from scratch. So, in terms with usability of the timeframe that was given, the ASP.NET option seemed feasible.

Another comparison would be the knowledge of the languages and platforms. The group at least knew HTML/CSS and JavaScript but when it comes to a programming language that is needed for either platform, C# and Python were both an open option. None of the team members were familiar with any of the web framework which shows that it will become a learning curve to learn these languages. However, most of the team members were more familiar to C# (Due to past experience), which allowed us to make the decision to use ASP.NET as the platform to build the client’s website.

In terms with the database, it was discovered that Visual Studio had its own inbuilt database which can be accessed by their own cloud host provider: Microsoft Azure. The objective was to have an external SQL database integrated such as Oracle SQL or MySQL. The decision was to use MySQL as it was the database platform that every team member was familiar with which made it easy for everyone to contribute. However, it was not considered that if Visual Studio currently supports external databases or not.

**Outcomes as of Sprint 1:**

In sprint 1, the project was started on a Visual Studio template using the ASP.NET framework where the front-end development but upon creating that, there were issues of sharing the project to other users using GitHub which required an additional installer and didn’t link up to the repository well. It was later discovered that Microsoft had their own Team Foundation Services which meant using 2 different repositories for the projects. Another issue was the MySQL database linking which required an installer for Visual Studio, but it didn’t correspond to the server where the decision was made to use the in-built SQL database in Visual Studio. When consulting with the client, it was discovered that they want an external database that is connected to the cloud, so the decision was made to use Django.

This decision was disappointing as we had to migrate platforms and start the whole project scratch closer towards the sprint 1 release date. This however made the sharing of the project much easier on GitHub as Django can be developed in many different IDE’s where we all chose PyCharm. There was a big learning curve towards this platform because it required us to learn and develop at the same time. This also involved us to recreate the project in Django as well but when remaking this project for the third time, we all had the platform connected to MYSQL database and also got it hosted on the AWS server. We were also able to make use of the Django forms to make a signup page and interact with the database along with the booking system. Django has been an ideal framework for Sprint 1 and the learning curve is still being continued for Sprint 2 which should satisfy the client’s requirements.