**Task 3.2: Solution Direction and Design**

1. Problem domain

* Health Pharmacy company
* Record sale manually (paper base), therefore, time wasting and insecure.
* Difficult to understand weekly and monthly sales record.
* Run out of in demand stocks. Therefore, decrease the relationship with customers and competitive.

1. Solution domain

* A system allows user to add, edit and remove items as well as recording sales into a database.
* A system displays weekly and monthly sales record graphically for easy understand.
* A system analyses sales record to predict the next sales record
* A system gives a warning when stocks are on low.
* A system

1. Comparison between Desktop application and Web-base application

There are 2 different possible solution for Health Pharmacy company which are Web-base application and Desktop application.

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| --- | --- |
| Web-app | Desktop app |
| Web browser for accessing the application (flexibility) | Need to be installed to a particular operating system: Mac, Linux and Windows |
| Less expensive | More Expensive |
| Internet connection therefore, risk of security breach. | Offline, therefore security |
| Maintenance or updating only need to be installed once. | Maintenance could be hard when it comes to update because it has to be done in every computer |
| Access anywhere using internet | Access by physical location |
| Slower because data is transmitted over the internet | Faster because data is accessed locally |

1. Team member’s knowledge

* Basic understanding of retail industry in general and Health Pharmacy store in specific.
* Normally the store open 7 days a week and staff would add sales record to the system every day.
* Manager would generally require to see the sales record in graphic and would like to know the sale prediction of the next period.

1. Team member’s experience

* One team member has knowledge of web programming language such as HTML, CSS, JavaScript, PHP and MySQL
* The rest of team have experience in programming language such as C#, C++ and Java. He is also able to apply Microsoft Access as a simple database.
* All team members have never built native desktop application.

1. Competitors

* Tableau is a leading sale reporting software. They offer
* Easily access to Salesforce which is a cloud-base software.
* Easy setup and customise without prior programming language
* Automatic forecasting
* Cost: ($1,999 per user)

1. Propose solution

* After discussion within the team, we decided to build web-app application for Health Pharmacy Company because:
* All team members have not been comfortable with desktop app.
* Web-app provides flexibility and maintainability
* Web-app also offers scalability which adapts perfectly to the company growth.
* Although there is a risk about security, we can avoid it by restricting the right of access to the system

1. High-level design

