**Michael Tasks**

TOOLS AND TECHNOLOGIES

**What software or other tools are required by the project?**

Integrated Development Environments

* HTML / CSS / JavaScript: Notepad++, NetBeans or Visual Studio
* SQL: Microsoft SQL Server

Version Control

* Git: GitHub

Operating Systems / Servers

* Microsoft: Windows 10 Pro, Windows Server
* Linux, Ubuntu SQL Server

File Sharing and Collaboration

* Microsoft Teams
* Dropbox

**Are there any software licenses needed?**

Microsoft SQL Server -> <https://www.microsoft.com/en-au/sql-server/sql-server-2017-pricing>

* Standard-Per core: US$3,717

Visual Studio -> <https://visualstudio.microsoft.com/vs/pricing/>

* Enterprise – Standard Subscription: USD$2,569 / renewal

Microsoft Windows Server -> <https://www.microsoft.com/en-au/windows-server/pricing>

* Standard: AU$972

Dropbox -> <https://www.dropbox.com/business>

* Business – Standard: AU$17.50 / month / user

Windows 10 Pro -> <https://www.microsoft.com/en-us/p/windows-10-pro/df77x4d43rkt?activetab=pivot%3aoverviewtab>

* Single License: US$199

**Is there any hardware needed?**

* Hard Drives (for data backups)
* Data Server (for online storage and connectivity)
* UPS (for data safety)

**Prior experience:**

SKILLS AND JOBS

As outlined in **Tools and Technologies**, our applications require a range of software and hardware, so its essential that we have people who have the skills to handle these processes.

As our application will be web based, HTML + CSS will be essential in ensuring that the website has a clean user interface, whilst also ensuring that it has the best possible functionality.

TESTING

To ensure that the application performs as expected, its important to develop a variety of tests. These tests can be specific to a particular function, such as returning a predicted health issue based on symptoms that are the most probable for that illness. As the application heavily relies on data, particularly the relationships between data, to find correlations and patterns to determine which symptoms are the most common for which particular disease, whilst also factoring in other variables such as age and gender. It’s important to note that data cannot always be 100% accurate; correlation does not mean causation, but the application can still attempt to provide the most probable prediction by analysing the data available.

An effective method to test the program could be to provide a prototype to individuals who do suffer from some kind of disease or illness, ask them to take note of their symptoms and personal information (age, gender), and compare their actual disease with the predicted one. If their actual disease was part of the predicted list (perhaps there could be a percentage probability for several diseases) and its high up on the list, then that could be considered a success. As is with any project, the most important person is the end user, so its important to allow them to test the application instead of just the developers.

RISKS

No matter how well you think you’ve planned a project, anything can go wrong and the entire project can run into problems. So, when a project is being planned, its important to identity possible risks and implement possible plans for when you have to deal with these risks. Risks can fall into several categories such as **cost** / **financial**, **technical**, **people**, and even in some cases the **client**.

In relation to our project idea, our web-based application requires a range of software tools as outlined in **Tools and Technologies**, and these each comes with their associated risks.

The fact that our project’s main function is to give people an accurate and reliable assessment of possible health conditions that they may have. This in itself is a major risk, as giving a completely incorrect result could have severe effects on the **client** (the user), including shock and anxiety from an incorrect prediction, which could then result in **backlash** on the business / developers.

In order for our application to give accurate and reliable predictions, it needs to have access to data and statistics for the majority of known health conditions, illnesses, and diseases. This can be risky, as not only will this most likely be very **expensive** to access, but it will also need to be updated on a regular basis to account for new diseases.

Databases will play a major role in the success of our application, but unfortunately, maintaining the integrity of these databases can be difficult in some cases. This can be several reasons, ranging from the difficulty to learn the software / programming languages, and ensuring that **people** (employees) have the **skills** to operate / manage such a database, which can result in a non-functional application.

As the user will be required to enter some personal information, such as age, sex, and any other past health conditions, as well as other optional information, this can result in **legal** risks, as the developers need to ensure that the privacy and security of the confidential information is of a high standard and obeys **regulations**.

**Schedule risks** are another common risk in many projects, and ours is no exception. Some activities may very well take longer than we predicted on our **Timeframe**, and this can result in many other risk factors becoming a possibility, including increased **cost**. If the project has a deadline and scheduling becomes an issue, then this could result in a **performance risk** as the application may fail to produce the results that were outlined in the specifications / requirements.

TIMEFRAME

|  |  |  |
| --- | --- | --- |
| **TASK** | **START DATE** | **END DATE** |
| Start Assignment 3 | 21/05/2020 |  |
| Project Description | 21/05/2020 |  |
| Overview | 21/05/2020 |  |
| Aim | 21/05/2020 |  |
| Plans and Progress | 21/05/2020 |  |
| Roles | 21/05/2020 |  |
| Scope and Limits | 21/05/2020 |  |
| Tools and Technologies | 21/05/2020 |  |
| Testing | 21/05/2020 |  |
| Risks | 21/05/2020 |  |
| Group processes and communication | 21/05/2020 |  |
| Skills and Jobs | 21/05/2020 |  |
|  | 21/05/2020 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Create website |  |  |
| Submit Assignment 3 | 31/05/2020 |  |