**HealthMegaMall Project Requirement**

The project is mainly related to diseases diagnosis based on big data technology. And the project is composed of two parts: Speech Recognition Application Development and Medical Data Analytics. The purpose of this project is to provide a system, which can be used to guide the user to describe his/her symptoms (in speech format) then an accurate diagnosis will be given based on our system. Apart from that, the system can also suggest a good way of dealing such problem. Below is brief introduction of the two parts of the project:

1. **Speech Recognition Application Development:**

The first part of the project is related to speech recognition and application development. In this part we need to realise a functionality of human-machine interaction using Natural Language Processing(NLP), Speech Recognition and some relevant technologies. The system could understand both Chinese and English language and could also speak these languages. Moreover, the speech recognition function could understand more complex syntax, which means some Synonyms are acceptable. This Speech Recognition function will enhance the performance of the website as well as provide technical support for the mobile application.

In addition, we need an application developed. This application could support both iOS and Android platform. The application could contain user login function, database interaction, and other necessary functions. The features and the logic of the application could refer to the website.

1. **Medical Data Analytics**

The second part of the project is related to big data analytics. This means that we need to extract main features and knowledge from millions of medical articles, and fit the data into our database in a standardized format. We need the data be understandable by the machine so that computers can learn the relationship between symptoms and diagnoses, which can be used in our system.

In this part, we want to enhance our database and gain a function of a more robust search of the disease. We want to load the database with plenty medical data so that the diagnosis will be more accurate. For instance, the system contains the latest disease and can give a most suitable treatment.