FRAME-BASED EXPERT DECISION SUPPORT SYSTEM FOR MEDICAL DIAGNOSIS

A THESIS
presented to
The School of Graduate Studies
Central Philippine University
Jaro, Iloilo City, Philippines

In Partial Fulfillment
of the Requirements for the Degree of
MASTER OF SCIENCE IN COMPUTER SCIENCE

By

CHERRY A. PALOMAR

January 2021

FRAME-BASED EXPERT DECISION SUPPORT SYSTEM FOR MEDICAL DIAGNOSIS

Palomar, C. A.

ABSTRACT

The Frame-Based Expert Decision Support System for Medical Diagnosis is a web based application designed for the use of a physician in providing a diagnosis to patients who undergoes medical consultation. It is a Decision Support System using the frame based expert system algorithm that assesses the possible diseases that a patient may have basing on the symptoms and patient information provided into the system.

The system includes the recording of information, storing of health records, diagnosing of patients, issuance of electronic prescriptions and generating of statistical reports.

The methodology used in the system is the extreme programming as the development process is continuous as the phases allows the system to be defined and modified as errors are encountered during the testing phase. The system is then released upon completion of the developed study and all modules tested has passed. Unit testing was used in testing the system developed as this allowed the each form of the modules to be tested thoroughly to accomplish the objective set.

As a result, the web based application was able to contribute in the diagnosis of the physician. With the knowledge base updated with the diseases and its relevant information, Physicians and patients provided a feedback that showed that the application was able to provide an accurate diagnosis based on the patient information that was provided to be able to assist the physician to arrive to a final diagnosis.