Abstract

The Machine Learning Software on Diagnosing and Treating Tuberculosis is a standalone expert system that aims to assist doctors, nurses, and health workers in diagnosing and treating Tuberculosis (TB). The system is capable of prescribing treatment based on the patients' data and tracking the progress of the patient based on his/her prescribed treatment. It is designed to alert users to keep the track of the patient's progress in taking the prescribed treatment. It keeps a database of the patient thus providing the user with patients' records and history. It features a modifiable knowledgebase which allows the users to update treatment criteria and characteristic.

To make the system a more human like expert in TB, the proponents conducted interviews with several experts in the field of TB. The gathered data from the experts is used as the basis of the system's knowledgebase in diagnosing and treating TB. Unlike conventional programming, developing an expert system is a highly iterative process which requires up to date knowledgebase.

C# is the primary language used by the proponents in programming the proposed system. It was developed by Microsoft and it is a simple, modern, general-purpose, object-oriented programming language. The proponents used Visual Studio 2010 as the programming platform of C# to create a friendly user interface, database and Crystal Report in generating patients' reports.