

CPSC-435: UNIX System Programming, Summer'2017

# **Final Project Report**

## **Unix Database Program For Hospital**

Submitted by:

**Tanveen Kaur (1014603)**

**Karmir Sidhu (1015507)**

**Seoung-David Nhem (0975734)**



Department of Computer Science  
University of Bridgeport  
Bridgeport, CT-06604  
USA

## Introduction

Unix System Programming is shell language that are used in IT management, especially for Database Administration. In this project, Unix programming is used to manage database of records for a certain organization, in this case, a Hospital. Thus, Unix program will be written to achieve multiple jobs such as creating, updating, and deleting one or more records in the hospital database.

## Project Scopes

The purpose of the Unix database program is to serve the administrators in handling clients or patients records in the Hospital files server. The program will be able to do different functions as well as to display different output formats. In addition, the Unix program will be able to organize multiple databases such as Buildings (multiple) database, Building (single) database, Room Database, Doctor database, Patient database, Admitted Patients (Customers) database, Pharmacy database, and Pharmacy Prescriptions database. These databases will be linked and connected to each other in according to the relational database model.

For Unix shell commands, it must have all necessary options implemented with basis of menu driven options selection. These option include retrieving specific records, adding new data, searching one or more records, and updating or deleting records in certain databases. Thus, **getop** function is used to make the program more efficient and easier to use, especially when the program has multi-purposes. Similarly, **awk** command can be used to perform data query and records selection quickly because of the simplified Regular Expression used in this method. Therefore, the Unix Program codes will be improved in terms readability and writability.

# Database Design Diagram

