

**LA GRANDEE INTERNATIONAL COLLEGE**

**Simalchaur, Pokhara, Nepal**

A Project Proposal/Report

on

**Patient Record System**

**Submitted to**

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# Executive Summary

In short, Our program “Patient Record System” will assist in easier management of Patient’s record in using a computer system. This program will allow the user to add new patient with their details which are their name, district, disease, age, sex, severity and prescribed medicine and the program will automatically assign the patient with an unique code which can later be used to easily identify a specific user easily within our program. You can also search for an already existing patient using their patient code or general information to either update their data, show their data or remove them from the “ongoing treatment” section and move them to “treated or transferred-to-another-hospital” section. If a patient has already been in the hospital before and has arrived again, you can search within the “treated or transferred-to-another-hospital section” to view their previous data and update the data and move him/her to “ongoing treatment” section and assign them a new patient code.

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# List of Abbreviation

PRS: Patient Record System

BCA: Bachelor of Computer Application

Repo: Repository

# Introduction

This program titled “Patient Record System”, short for PRS is a program which will be created by four BCA Second Semester students studying in LA GRANDEE International College as their first project to gain programming knowledge and skills and strengthen our social relation by working in a group. This program will be written solely in C Programming Language and will imitate the work behavior of actual such system used in health organizations. The four students working in this project are Deven Shrestha, Sandesh Bastola, Nobel Baral and Sunil Neupane.

# Problem Statement

A lot of people come in a hospital to get checked and cure their diseases. Of course, the hospital can manage the patient’s data in a traditional system using paper but that way is more risky and time consuming. Papers are prone to damage through fire, water and other components and can easily be destroyed. In addition to that searching through different files just to update one patient’s information can be a time consuming process. Furthermore some files can be lost and cause massive problem to both the patient and the hospital. This program aims to solve such issue by handling the patient’s data through a computer.

# Objective

The objective of creating this program are as follows:

* Familiarize students partaking in this project with C
* Provide easy to use and manage interface to record and manage patient’s data

# Background Study

By consulting Susil who is one of the member of this group project and works in a hospital, we learned that Patient Record System is one of the most useful and crucial part of a hospital system. He provided valuable insights on what the software does and the benefits it provides. He also added that this system is invaluable to hospitals and has saved a lot of patients and hospital workers headaches and annoyance while dealing with patient’s record.

# Methodology

We are going to use various programming techniques we will learn through the internet and in college to create the PRS system. Here are the current methodology we have planned that we will use to create the system, do note that the given methodology are subject to change as we get more experienced with the process:

* All members of our group will create a github account and commit all their contributions in a repo named Patient-Record-System-in-C (<https://github.com/DevenStha/Patient-Record-System-in-C>)
* There will be different folders for each members corresponding to our names in the reposititory, each members will commit only in their corresponding repository and after discussion with each member the approved code will be applied in the main program.
* The program will store previous patient’s data and current patient’s data separately.
* Each patient will have their own unique patient code.
* When the program runs, it will first ask if the patient has been in our hospital before and if he/she has then the program will ask the patient code of the patient while he/she were admitted in the hospital and search through the previous patient’s data and the user can update the data and the patient will be assigned a new code.
* If the patient has not been in our hospital then it will ask the user to enter patient’s name, address, age, sex, disease, severity and prescribed medicine.
* The user can search for current and previous patient records using the patient’s code to update, view and delete them.

# Problem Identification

Hospitals have a hard time managing and storing patients data in physical files. Those files are highly prone to damage and consume a lot of time to search to through them. Hospitals employees have much more important crucial things to do so the reduction time spent managing data in files will help the hospital to be more productive and may even save someone’s life. This program will assist in doing just that. This program will allow the user to add, search, view, update and remove patient’s data quickly. All the data are stored locally on a computer so searching and updating the data will be much faster. There is no need to worry about some files being wet, burnt and torned apart in this system. So, this program is made to solve the patient recording issue by allowing the user to store and manage the data in a computer.

# Feasibility Analysis

Feasibility analysis is the process of analyzing different factors such as Technical and Economic to assess the potential and viability of implementing a program or idea. Here we are going to analyze the technical and economic prospect of PRS:

## Technical Analysis

The programming experience within our group is very limited. But since the scope of this project is not to implement the system in an actual hospital but to strengthen our programming skills and social bond, we think that this is a great opportunity for doing that. In addition to that, creating this program will require creating features like taking inputs, storing data in a file, reading/viewing/modifying/removing data from said file we think that this is a wonderful opportunity for us to become familiar with such basic concepts of programming and it seems within our ability to grasp those concept and complete the project with due respect given to the deadline. Here is a table of a little survey we did within our group about our programming knowledge:

|  |  |  |
| --- | --- | --- |
| Student | Programming Knowledge | Language |
| Deven Shrestha | Little bit | C++ |
| Nobel Baral | None | N/A |
| Sandesh Bastola | Little bit | C |
| Susil Neupane | None | N/A |

Table 7.1.1 – Survery of our group about programming knowledge

## Economical Analysis

Since, this is a college project of relatively small scope we have estimated that the cost concerning with creating this project will be reasonably low. We are expecting to have minimum monetary expenses outside of printing our required proposal, mid-term progress report and final project report. Here is a table with rough estimation of our expenses:

|  |  |
| --- | --- |
| Expenses | Estimated cost |
| Printing Project Proposal | NRs. 220 |
| Printing Mid-term Progress Report | NRs. 250 |
| Printing Final Project Report | NRs. 300 |
| Miscellaneous | NRs. 300 |
| Total | NRs. 1070 |

Table 7.1.2 – Estimated expenses for this project

# System Design

A program is easier to build when you have laid your plans in a form of algorithms and flowchart. Algorithms and flowcharts can avoid burn out from being overwhelmed by a project.

## Algorithm