Project Report

NSU Vaccine Management System

CSE311L Database System Lab

Department of Electrical & Computer Engineering

North South University

NSU Vaccine Management System – NSUVMS

Introduction

NSU vaccine management system (NSUVMS) is a web-based project that can manage vaccination information of the university students and staffs also has admin controls to manage vaccine information.

This website can manage the vaccination data for the university that help higher authority to take next decisions based on the analytics. From user level view, user can create a unique profile by signing up. User can select and enter their information and update time to time. Editing profile and removing profile is also activated. The most important thing here is the vaccine name and vaccine dates of a user and system will check them. This website can handle user data validation properly so that admin can have a correct result based on users' data.

There is admin view level of this system. Admin can search every user by their unique NSU id. There is the admin dashboard where admin can see analytical result from users' vaccination data and can manage university departments, vaccine name, vaccine companies and other information. Only admin has the power to add or remove department and vaccine data. Student or staff cannot access to the admin panel.

NSUVMS can help the university authority to take their decisions from the resultant statistics and monitoring students vaccination progress. This will help them to take necessary steps for upcoming days.

Background Research

Motive of this project is COVID-19 vaccination system. Government is providing vaccine for everyone but it takes time to complete every student's vaccination. Also, without vaccination universities cannot reopen their campus and continue academic activities. So, university authority could not take any steps in this situation.

NSUVMS provides the solution to the authority of university to manage vaccination process of their students and staff's together under a dashboard. Also, authority have analytical results that will help them to take their next decisions from student and staffs vaccination data.

NSUVMS will provide the solution for authority to see the progress of their vaccination process and they can take necessary steps. NSUVMS is more focused on the progress of NSU students and staffs. We have tried to solve the problem for the authority. And for the last one year we have faced lots of problems regarding reopening campus. So, we tried to solve the problem.

Technologies

Tech stack that has been used in the project:

- HTML
- CSS
- PHP
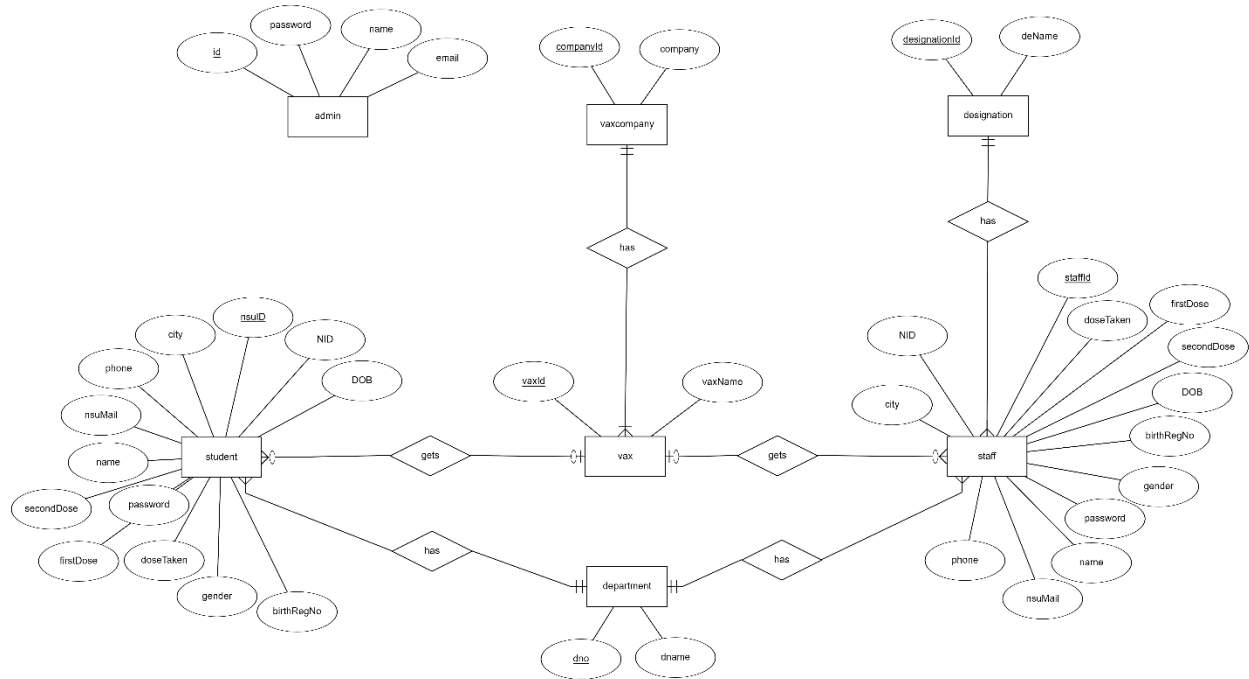- JavaScript
- MySQL
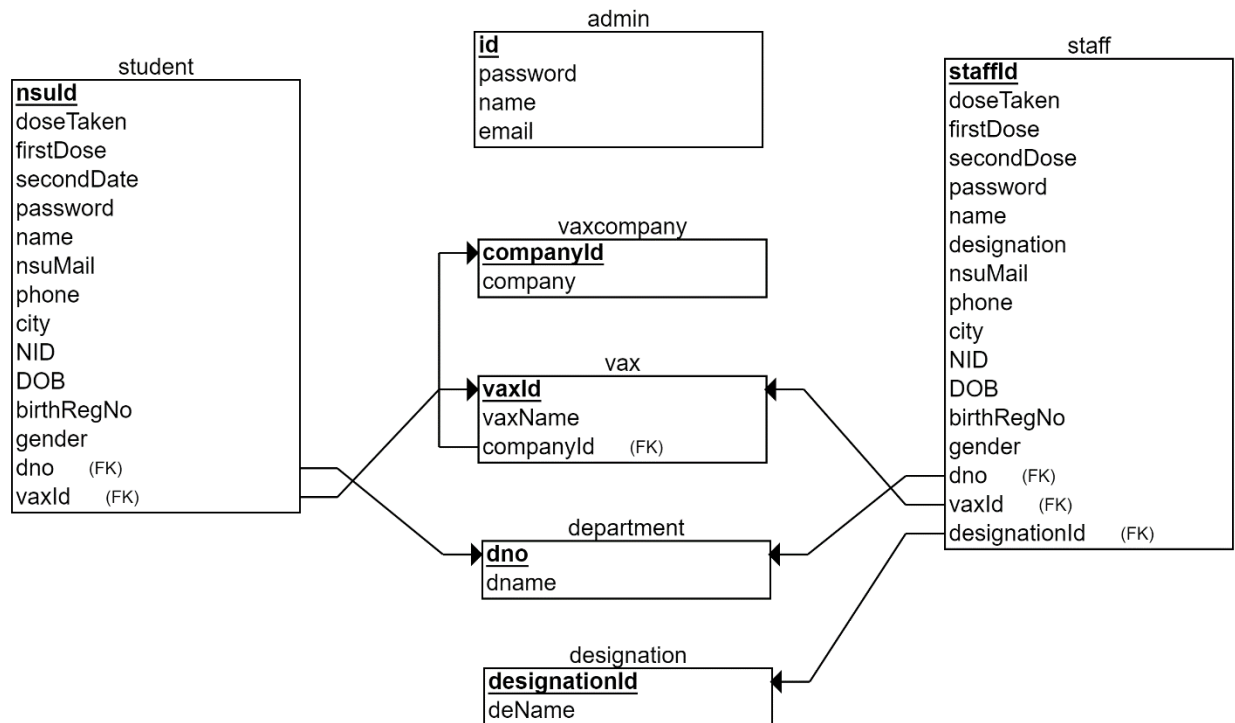- Google Charts

Project Design

Description of users:
There are three types of users. Only admin has the more power than users and users individual roles and features are given below in the table form.

User Type	Roles	Features
Admin	- Watching all resultant statistics - Add/Remove Department/Designation - Add/Remove Vaccine/Company - Search user by Id	- Unique identity - Password
Student Staff	- Sign up/Log in - Update profile - Edit profile - Password recovery - Watch total statistics	- Unique Identity - Personal Identity - Vaccine Name - Dose Taken - Dose Taken Dates - Mail - Password - Department

ER Diagram:

Relational Model:

Sitemap
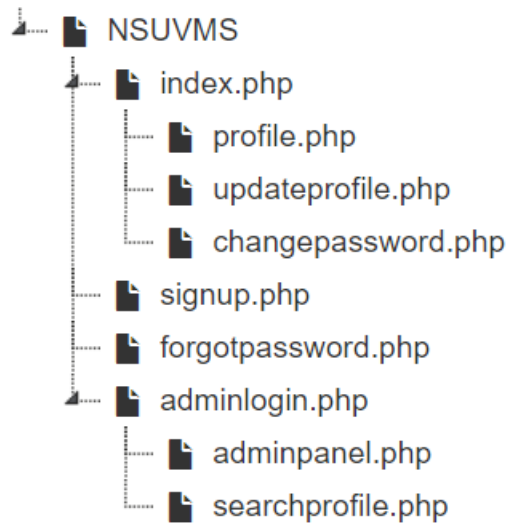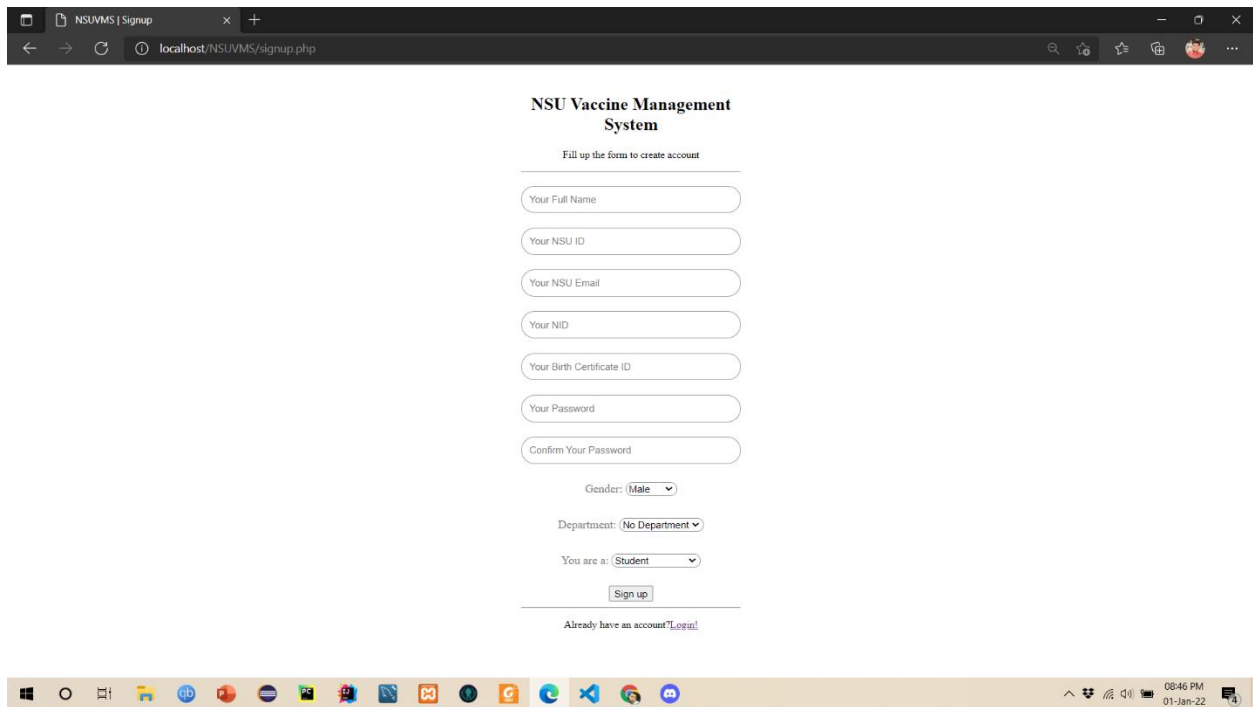
Snapshots

User Login Page (index.php):

Signup Page (signup.php):

User Profile (profile.php):

Update Information Page (updateprofile.php):

Update Password Page (changepassword.php):
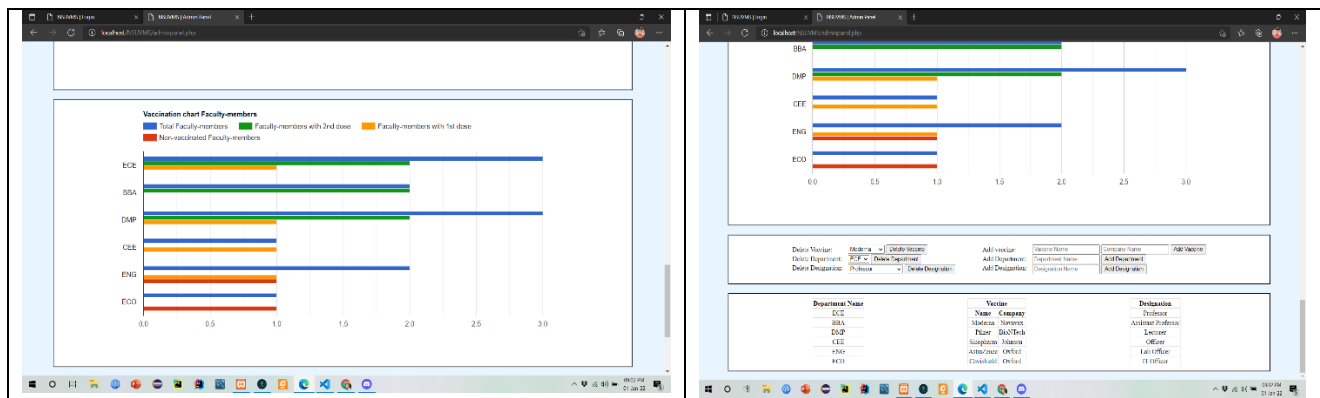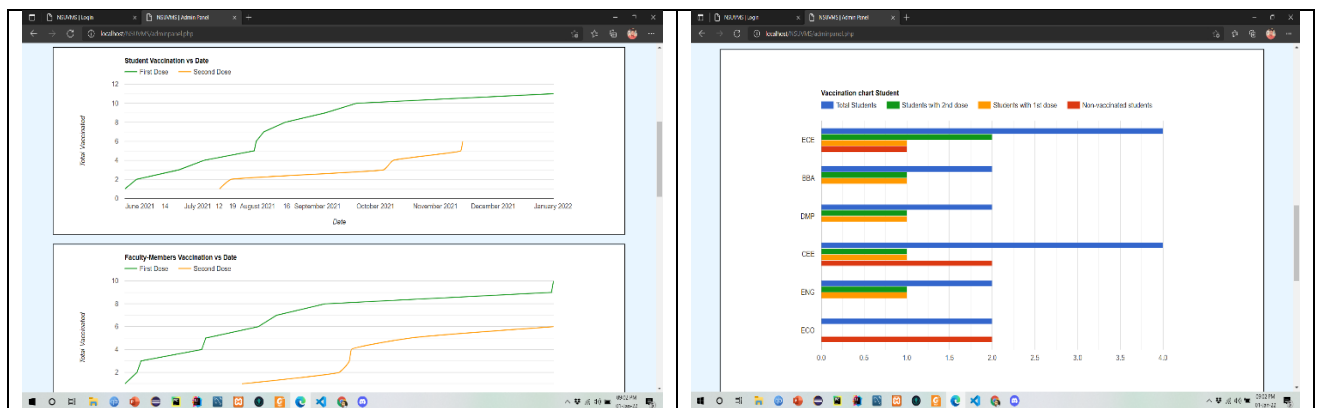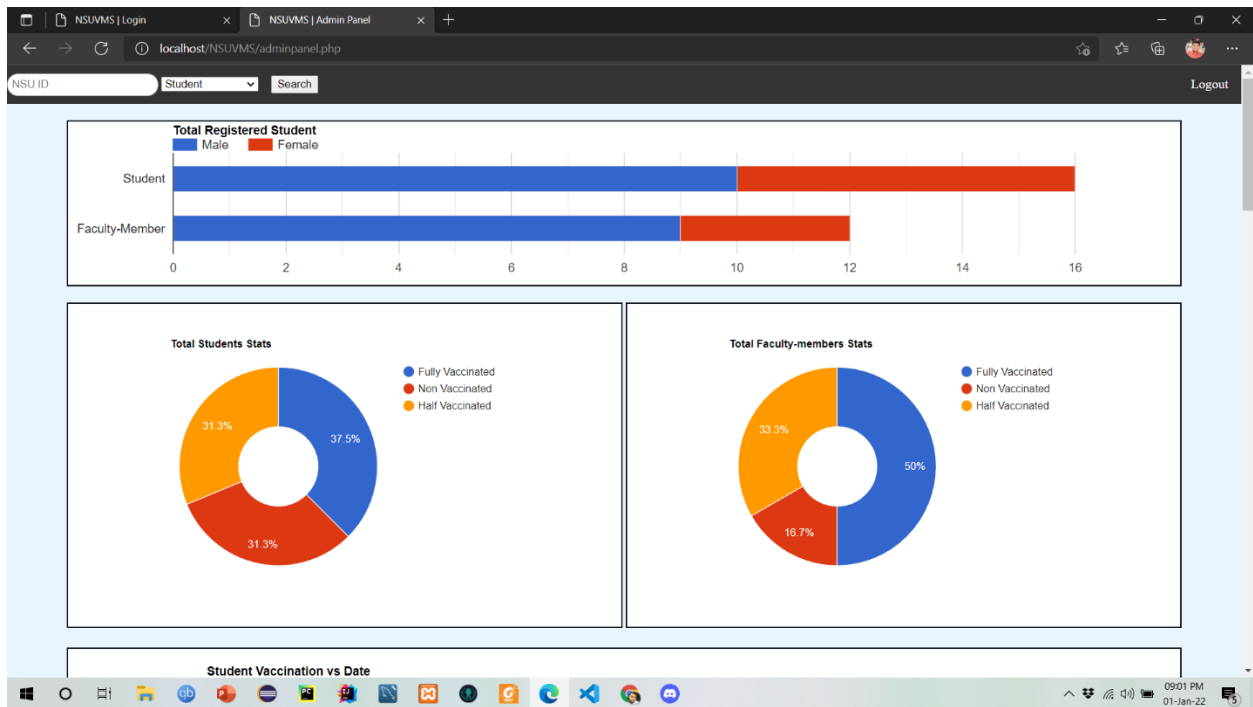
Forgot Password Page (forgotpassword.php):

Admin Login Page (adminlogin.php):

Admin Panel View (adminpanel.php):

Conclusion & Future Work

Project success and findings:
This project has been completed with all the requirements needed. Our web is ready for use and we can see correct output or resulting data from our web application. This project has been tested against several test data and our output was accurate.

How this web application can be improved:
This web application can be improved by applying tools and technologies for large scale of data. There can be implement better queries and reduced time complexity. That will be more efficient for this application. Also, user interface can be improved, its real time technologies can be developed.

Contributions

Ihsanul Haque Asif 2013664642
Contributes in back-end functions, database design and documentations

Shah Alvi Hossain 1721427042
Contributes in integrating front-end with back-end

Md. Nahin Islam 2013356042
Contributes in front-end design layout