



NSBM Course Enrolment System

TAKE HOME ASSIGNMENT

Jayawickrama G B P | 16000633 | SCS 2104 - Programming III

Introduction

The NSBM course enrollment system allows students to register for degree programs within the registration period. This is a stand-alone application which built using java programming language.

Objective

The objective of this application is to eliminate hassles that the students overcomes while registering them. This will reduce the paper work and reduce the time delay.

Users of the System

- Student
- Administrator

Administrator login:

Username – admin

Password – pass

Libraries, Plugins and Tools used

- JDK 1.8
- MySQL JDBC Drive 5.1.23
- JavaFX
- Fontawesomefx 8.9
- NetBeans IDE 8.2
- Gluon SceneBuilder 8.5
- XAMPP 3.2.2

System Functionalities and User Interfaces

When the application runs it will direct to a user login interface.

Login

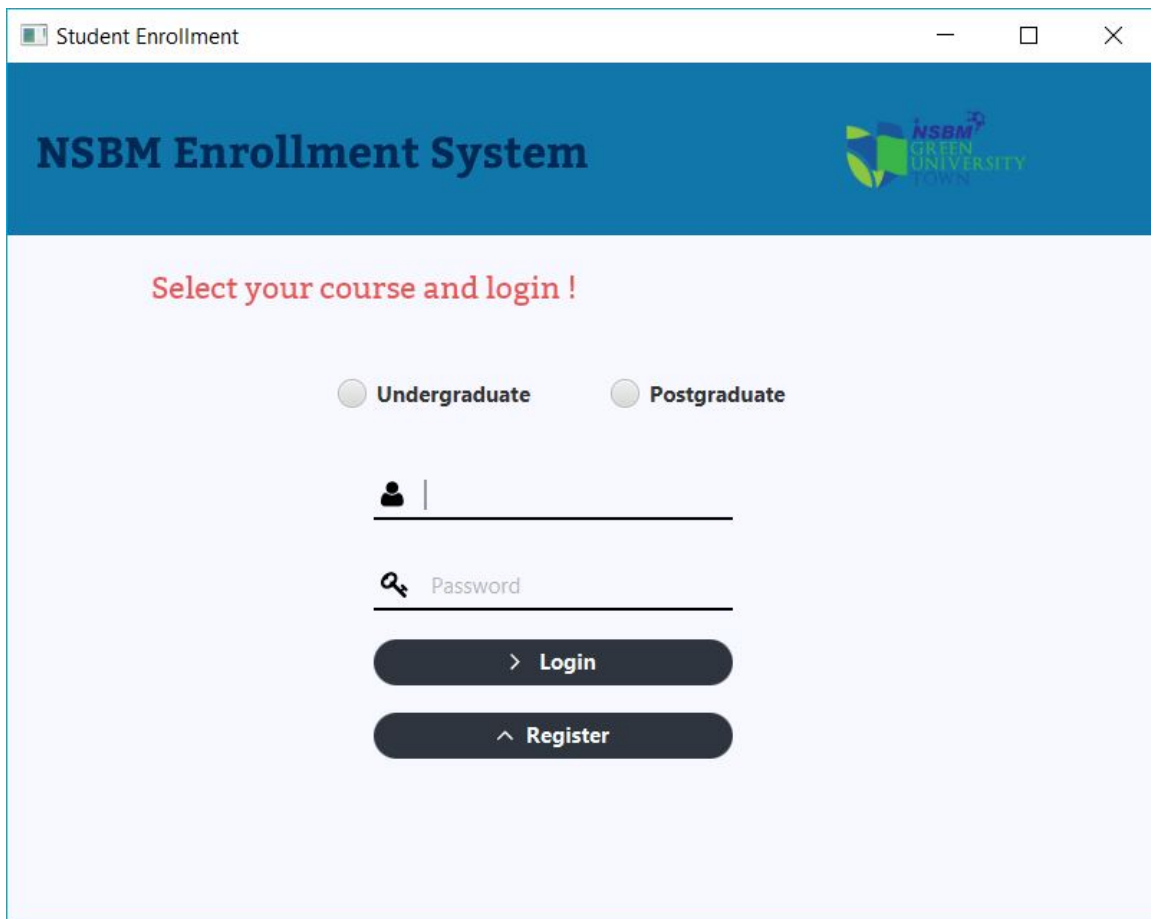
System has two way of user logins

- Registered Student

Registered student can only use system to select subjects or/and remove selected subject within a two week of period.

- Administrator

Administrator take care of other process like subject or course allocation, lecture location allocation, enter assignment and exam marks etc.



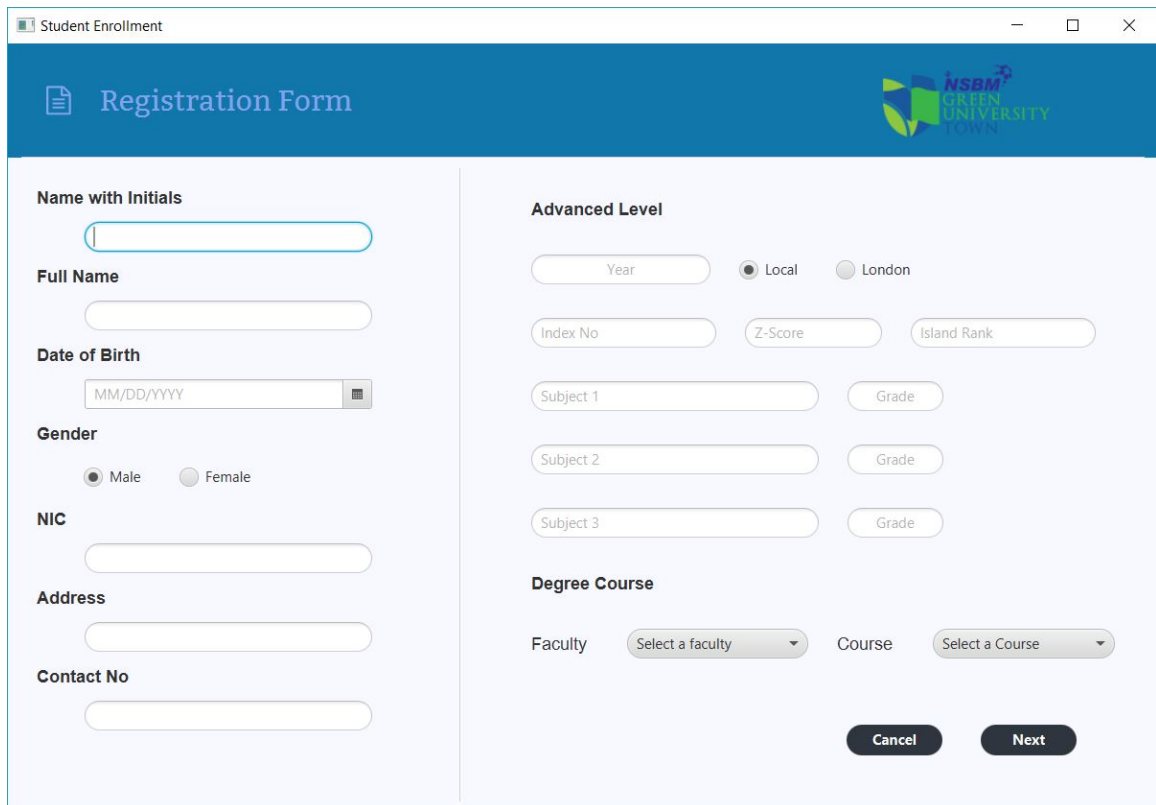
The screenshot shows a web browser window titled "Student Enrollment". The page has a blue header with the text "NSBM Enrollment System" and the NSBM Green University Town logo. Below the header, the text "Select your course and login !" is displayed in red. There are two radio buttons for "Undergraduate" and "Postgraduate". Below these are two input fields: one for a username (indicated by a person icon) and one for a password (indicated by a key icon). At the bottom, there are two buttons: "> Login" and "^ Register".

System has two main student classes undergraduate and postgraduate. If you are willing to a do degree or a master need to register with the system.

Registration

Student must select their graduation type in-order to process ahead.

Then click one the registration button on the login page you will direct to registration page according to your selection.



The screenshot shows a web browser window titled "Student Enrollment". The page has a blue header with the text "Registration Form" and the NSBM Green University Town logo. The form is divided into two columns. The left column contains fields for "Name with Initials", "Full Name", "Date of Birth" (with a date picker), "Gender" (radio buttons for Male and Female), "NIC", "Address", and "Contact No". The right column contains an "Advanced Level" section with a "Year" field and radio buttons for "Local" and "London". Below this are three rows for "Index No", "Z-Score", and "Island Rank". Further down are three rows for "Subject 1", "Subject 2", and "Subject 3", each with a corresponding "Grade" field. The "Degree Course" section at the bottom has "Faculty" and "Course" dropdown menus. At the bottom right of the form are "Cancel" and "Next" buttons.

Undergraduate form.

Student Enrollment

Registration Form

Name with Initials

Full Name

Date of Birth

MM/DD/YYYY

Gender

☒ Male ☐ Female

NIC

Address

Contact No

Qualification

Year Completed

Institute

Master Degree Course

Faculty **Select a faculty** Course **Select a Course**

Cancel **Next**


Postgraduate form

When you select a faculty course list will generate automatically.

You can't go further without filling any of these. System can handle such exceptions.

Student Enrollment

Registration Form



Name with Initials

Full Name

Date of Birth

Gender
☒ Male ☐ Female

NIC

Address

Contact No

Advanced Level
 ☒ Local ☐ London

Degree Course
Faculty Course

Unfinished

Please complete all fields

OK

After filling all required details you will be directed to account creating page by clicking next. In here system will give you a system generated username and you have to enter your email and password only.

The screenshot shows a web browser window titled "Student Enrollment". The page has a blue header with the text "Registration Form" and the NSBM Green University Town logo. The main content area is light blue and contains the text "Create your login account:". Below this text are four input fields, each with a small icon to its left: a person icon for the first field containing "2018/ug/14", an envelope icon for the "Email Address" field, a key icon for the "Password" field, and another key icon for the "Confirm Password" field. At the bottom of these fields is a dark blue button labeled "Done".

After filling email and password clicking done user will directed to login page.

Then student have to login to your account in order to enroll subjects.

Enroll to Subjects

The screenshot shows a web application window titled "Student Enrollment". The interface has a blue header with a graduation cap icon and the text "Student Form", and the NSBM Green University Town logo on the right. A left sidebar contains a "Subject Enrolment" section with a book icon and a "Logout" button at the bottom. The main content area includes "Intake" radio buttons for "February" (selected) and "July", a "Semester" dropdown menu, and an "Additional Subjects" dropdown menu. An "Enroll" button is positioned to the right of the "Additional Subjects" dropdown. Below these is a table with columns "Subject Code", "Name", and "Cost". The table is currently empty, displaying "No content in table". To the right of the table, there is a red instruction "Enter subject code to remove", a text input field labeled "Subject Code", and a "Remove" button.

Subject Code	Name	Cost
No content in table		


You have to select intake month firstly, according to month can select semesters then you can select you additional subject/s to enroll. System assumed that student have per-knowledge on number of additional subjects that have to select.


All subject that you have selected will view in the table and you can dis-enroll using entering the subject code.


The student enrollment form only available in a certain period, in that period student can update their subject selections.


Student Enrollment


Admin Panel




 Student Records

 Marks

 Course & Subject

 Hall & Labs

 Academic Staff

Logout

Student ID

12

Semester


Semester 1


Search


Subject	Mark
Introduction to Computer Science	100
Programming in C	98
Algorithms and Data structures	90


Student Enrollment


Admin Panel




 Student Records

 Marks

 Course & Subject

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Logout

Student ID

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Semester

Semester 1

Search

Subject	Mark
Introduction to Computer Science	100
Programming in C	<input type="text" value="98"/>
Algorithms and Data structures	90

Admin – Course and Subjects

In this admin can add new courses and their subjects to the system.

The screenshot shows a web application window titled "Student Enrollment". The top navigation bar is blue with the "Admin Panel" label and the "ASBA GREEN UNIVERSITY" logo. A left sidebar contains menu items: "Student Records", "Marks", "Course & Subject", "Hall & Labs", "Academic Staff", and "Logout". The main content area is titled "New Entry" and contains two forms. The first form has fields for "Course Name", "Faculty" (a dropdown menu showing "SCHOOL OF COMPUTING"), and "Course Type" (a dropdown menu showing "Undergraduate"). It includes "Clear" and "Add" buttons. The second form has fields for "Subject ID", "Subject Name", "Credits", "Price", "Faculty" (a dropdown menu showing "SCHOOL OF COMPUTING"), and "Course Type" (a dropdown menu showing "Undergraduate"). It also includes "Clear" and "Add" buttons.

Admin – Hall and Labs

Admin can assign subject instructors and labs. In here head instructors id will only marked. Instructor ID column refers to the ID number of the relevant instructor for each course and the ID number reads 0 it means there is no instructor currently assigned for that specific subject. Same as the lab ID column both can be updated by double clicking and entering on the relevant cell.

Student Enrollment

Admin Panel

Student Records

Course Type: Undergraduate Faculty: SCHOOL OF COMPUTING

Course Name: BSc (Honours) in Computer Science Semester: Select one

Marks

Course & Subject

Hall & Labs

Academic Staff

Logout

Search

Subject Id	Subject Name	Instructor ID	Lab ID
CS/1101	Mathematics I	2	
CS/1102	Introduction to Computer Science	4	
CS/1103	Programming in C	0	
CS/1104	Professional Development	0	
CS/1105	Algorithms and Data structures	0	
CS/1201	Object Oriented Programming with Java	3	A
CS/1202	Database Management Systems	0	
CS/1203	Computer Architecture	0	
CS/1204	Data communications and networks	1	A
CS/1205	Web Based Application Development	0	

Stability of the system

- In most of cases the system have ability handle exceptions
- System used CachedRowSetImpl to hold some date without live database connection
- Login panel improve the security problems