

Barcode Based Fine Paying Java Project

Abstract:

“Barcode based fine paying” is a java project developed in java and MySQL database. This project enables user to pay the fine without standing in the long queue in front of the student section. The user can pay library fine, late fee, lab fine just from this project. User can even see his last five transactions he/she has done. The users have to recharge the card allocated to them. Every user having a card with unique barcode, which is used for recharging the card and paying the fine.

Existing System:

In existing system, users have to stay in the long queue waiting for their turn to pay the fine. Sometimes, the counter gets closed and the user has to pay the fine next day with an increased fine. This system takes a lot of physical efforts and time.

Proposed System:

The proposed barcode based fine paying system provides an easy and efficient way of paying different fines. The user needs to recharge the card before paying the fine.

Modules:

Admin: Admin needs to get logged in by entering valid credentials. Admin can create new cards, can issue them to the different users, can recharge the cards, can give fine to different users.

Card User: The user has to give his details to the admin during issuing the card. User needs to get logged in by entering the valid credentials. User can pay fine and

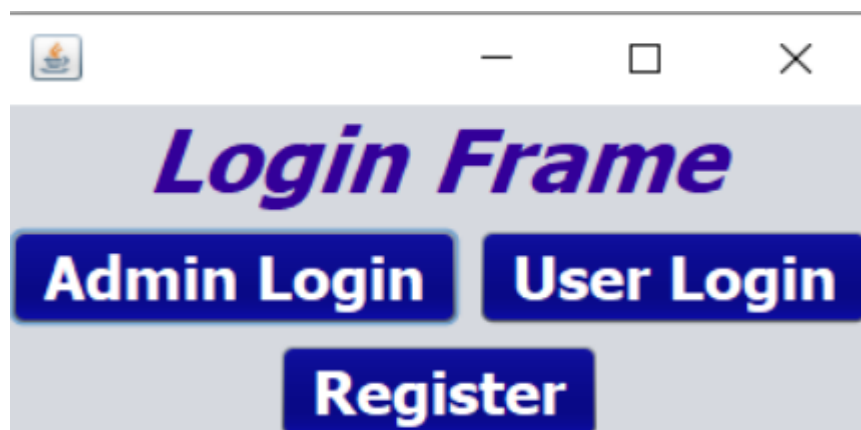
see his/her last five transactions. Transaction includes recharging the card and paying the fine.

Software Requirements to develop this application below:

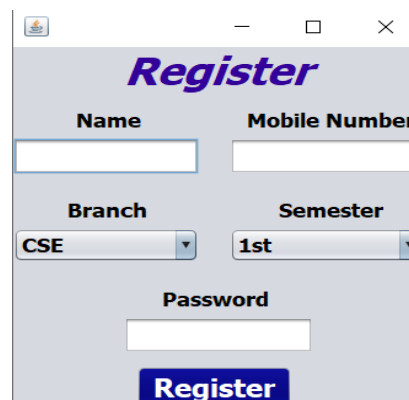
NetBeans IDE 8.1, MySQL 3.2.2, Bluetooth Barcode Receiver, Bluetooth Barcode Scanner.

Project Outputs Description:

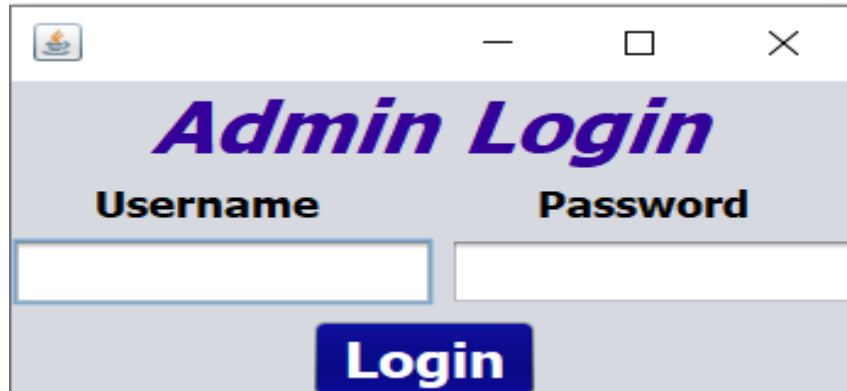
- Home page of barcode based fine paying project



- Registration Page

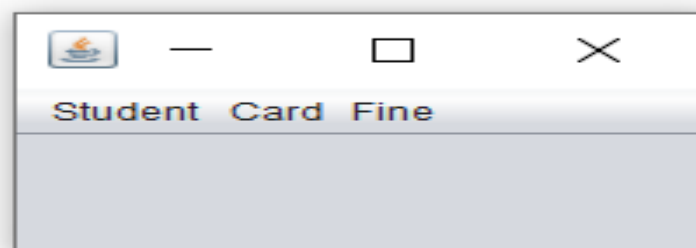
A screenshot of a web application window titled "Register". The window has a standard OS title bar with a minimize button, a maximize button, and a close button. The main content area has a light gray background. At the top, the text "Register" is displayed in a large, bold, blue, italicized font. Below this, there are five input fields arranged in three rows. The first row has two fields: "Name" and "Mobile Number". The second row has two fields: "Branch" and "Semester". The "Branch" field is a dropdown menu with "CSE" selected. The "Semester" field is a dropdown menu with "1st" selected. The third row has one field: "Password". At the bottom of the form, there is a blue button with white text labeled "Register".

- Admin Login Page

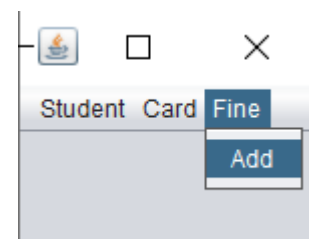
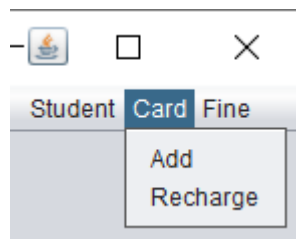
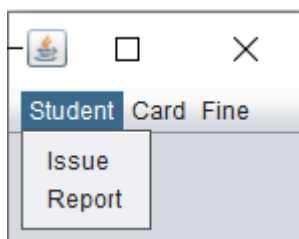


A screenshot of a web browser window displaying the 'Admin Login' page. The page has a light gray background. At the top, the title 'Admin Login' is written in a large, bold, blue, italicized font. Below the title, there are two labels: 'Username' and 'Password', both in bold black font. Under each label is a white text input field with a thin blue border. At the bottom center of the form is a blue button with the word 'Login' in white, bold, sans-serif font. The browser window has a standard title bar with a small icon on the left and minimize, maximize, and close buttons on the right.

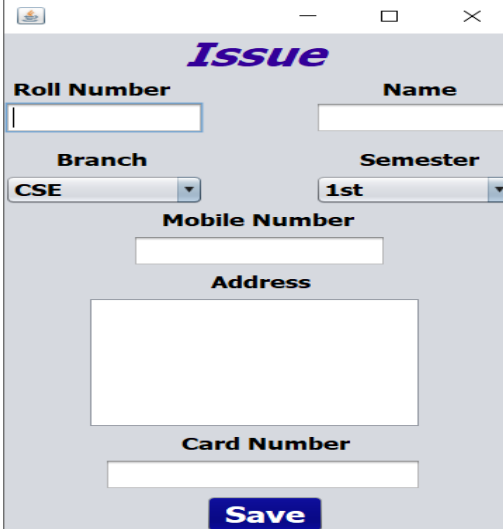
- Admin Home Page



- Different Admin Page Options



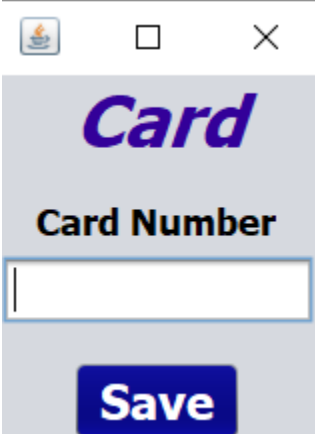
- Issuing Card



A screenshot of a web application window titled "Issue". The window has a light gray background and a standard Windows-style title bar with a minimize button, a maximize button, and a close button. The form contains the following fields and controls:

- Roll Number**: A text input field.
- Name**: A text input field.
- Branch**: A dropdown menu with "CSE" selected.
- Semester**: A dropdown menu with "1st" selected.
- Mobile Number**: A text input field.
- Address**: A large text area for input.
- Card Number**: A text input field.
- Save**: A blue button with white text.

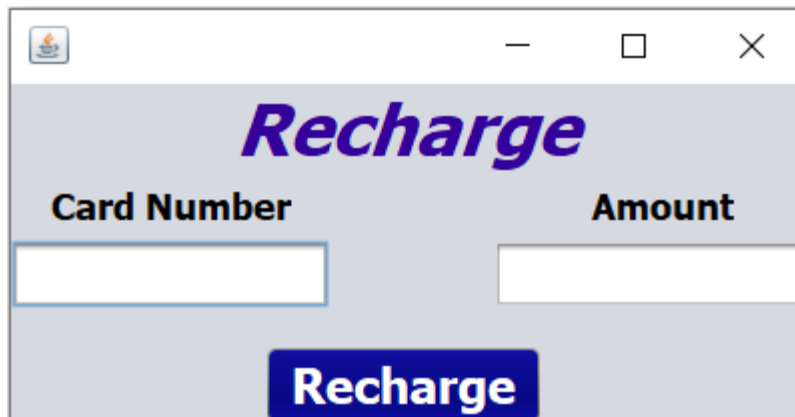
- Adding Card Into Database



A screenshot of a web application window titled "Card". The window has a light gray background and a standard Windows-style title bar with a minimize button, a maximize button, and a close button. The form contains the following fields and controls:

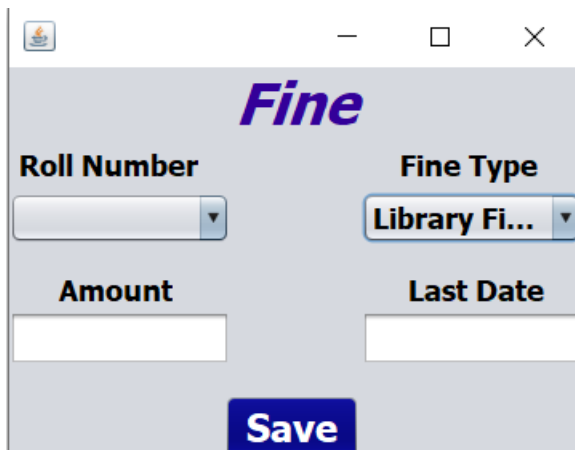
- Card Number**: A text input field.
- Save**: A blue button with white text.

- Recharging Card

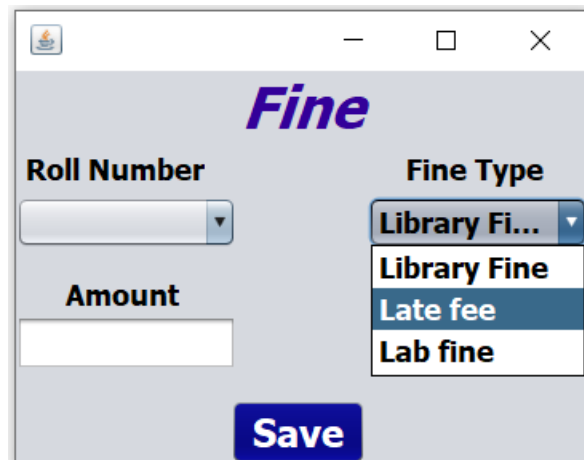


A screenshot of a software window titled "Recharge". The window has a light gray background and a title bar with standard Windows window controls. The main content area features the word "Recharge" in a large, bold, purple font at the top. Below it, there are two input fields: "Card Number" on the left and "Amount" on the right. At the bottom center, there is a blue button with the word "Recharge" in white text.

- Adding Fine

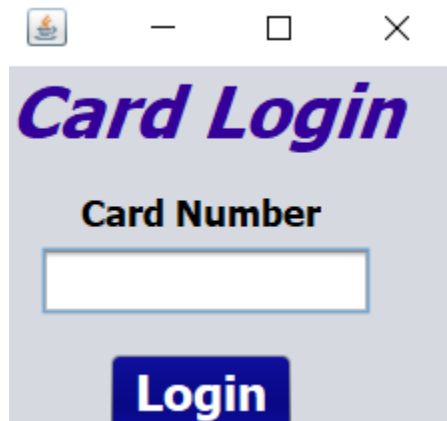


A screenshot of a software window titled "Fine". The window has a light gray background and a title bar with standard Windows window controls. The main content area features the word "Fine" in a large, bold, purple font at the top. Below it, there are four input fields: "Roll Number" (a dropdown menu), "Fine Type" (a dropdown menu showing "Library Fi..."), "Amount", and "Last Date". At the bottom center, there is a blue button with the word "Save" in white text.



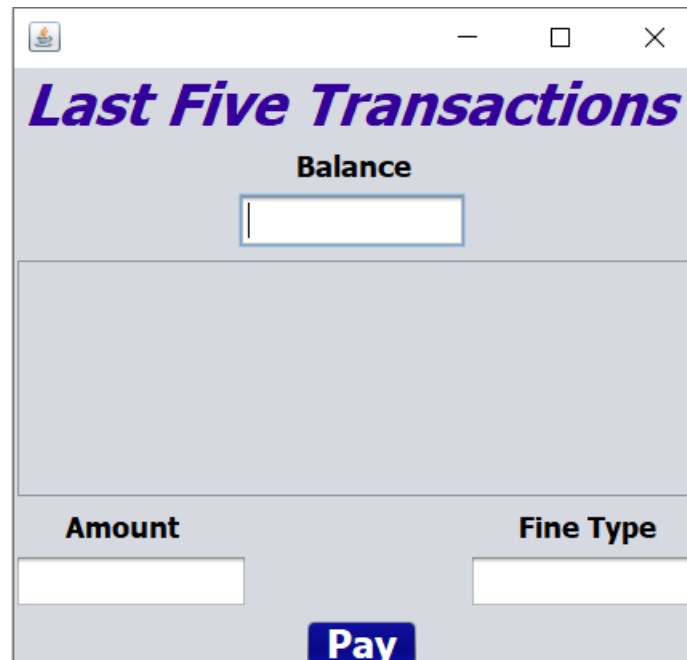
A screenshot of the same "Fine" window, but with the "Fine Type" dropdown menu open. The dropdown menu shows three options: "Library Fine", "Late fee", and "Lab fine". The "Library Fine" option is currently selected and highlighted in blue. The "Save" button remains at the bottom.

- Card User Login Page



A screenshot of a software window titled "Card Login". The window has a light gray background and a title bar with standard Windows window controls. The main content area features the words "Card Login" in a large, bold, purple font at the top. Below it, there is a single input field labeled "Card Number". At the bottom center, there is a blue button with the word "Login" in white text.

- Card User Home Page



The screenshot shows a web application window with a title bar containing a small icon and standard window controls (minimize, maximize, close). The main content area has a light gray background. At the top, the text ***Last Five Transactions*** is displayed in a large, bold, purple font. Below this, the word **Balance** is centered in a smaller, bold, black font. Underneath 'Balance' is a single-line text input field. A large, empty rectangular area with a light gray background occupies the middle section of the form. At the bottom, there are two input fields side-by-side. The left field is labeled **Amount** and the right field is labeled **Fine Type**, both in bold black text. Below these two fields is a blue button with the word **Pay** in white text.