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FACULTY: INFORMATION TECHNOLOGY
DEPARTMENT: SOFTWARE ENGINEERING
COURSE NAME: Web Technology and Internet
Project Name: MTN Sim-Card Registration system
ID & NAMES: 23688 KWIZERA Claire
DATE: 16th May 2023 GROUP: SUNDAY @18:00PM

WEB TECHNOLOGY AND INTERNET PROJECT

Description of my project

- **The MTN Sim Card Registration System is an application designed to facilitate the registration, management, and deletion of SIM cards by the admin. The system ensures that clients can register up to three SIM cards for their own use. Additionally, clients can view the SIM cards registered under their national ID and submit requests to unregister a SIM card using their national ID.**

Features

1. **Admin Functionality**

- **Admin Login: The admin can log in securely using their credentials to access the system.**
- **Sim Card Registration: The admin can register a new SIM card for a client by providing the necessary details such as client information, national ID, and SIM card details.**
- **Sim Card Edit: The admin can edit the information associated with a registered SIM card, including client details and SIM card details.**
- **Sim Card Deletion: The admin can delete a registered SIM card from the system.**
- **View Registered SIM Cards: The admin can view a list of all registered SIM cards, along with their associated client information.**

2. Client/User Functionality

- **Client Login: Clients can log in to the system using their credentials.**
- **View Registered SIM Cards: Clients can view a list of SIM cards that are registered under their name.**
- **Request Unregistration: Clients can submit a request to unregister a specific SIM card by providing their national ID. This request will be processed by the admin.**

Security Measures

- **Authentication: Both the admin and clients are required to log in with their unique credentials to access the system, ensuring secure access to the application.**
- **Access Control: Different levels of access are provided to the admin and clients to restrict unauthorized actions within the system.**
- **Data Encryption: Sensitive data such as client information and national IDs are encrypted to protect user privacy and prevent unauthorized access.**
- **Technology Stack**

My System is built using the following technologies:

- **Programming Language: [java , spring boot , spring MVC]**
- **Framework: [Spring MV , Spring JPA]**
- **Database: [Postegres]**
- **Front-End: [bootstrap, html , css , JavaScript]**
- **Back-End: [Spring MVC]**
- **Security: [authentication and authorization]**

Future Enhancements {NOT DONE}

SMS Notifications: Implement SMS notifications to inform clients about SIM card registration, deletion, or modification.

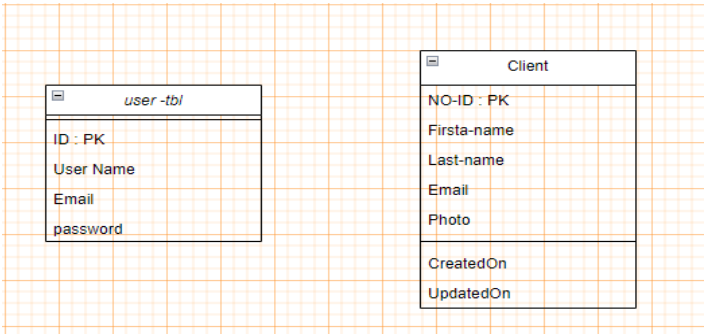
Analytics and Reporting: Provide comprehensive analytics and reporting features for the admin to gain insights into SIM card registrations and activities.

Integration with National ID Database: Integrate the system with the national ID database to automate client verification during registration and unregistration processes.

Conclusion

The MTN Sim Card Registration System simplifies the process of registering, managing, and deleting SIM cards. It ensures that clients can register up to three SIM cards under their name and facilitates secure communication between the admin and clients. With its user-friendly interface and robust functionality, the system improves efficiency and enhances the overall user experience.

Design the Database

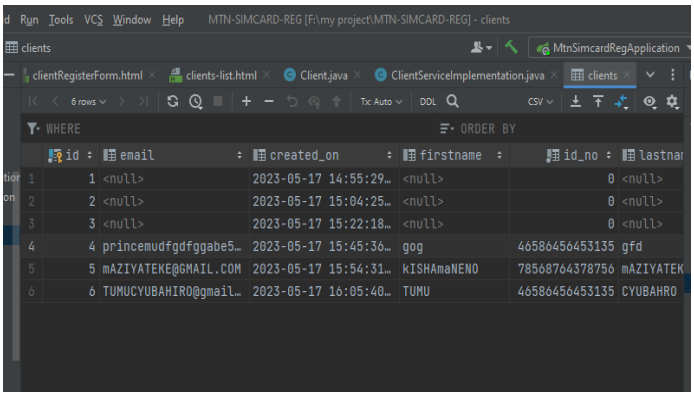


User-tbl

Data output | Messages | Notifications

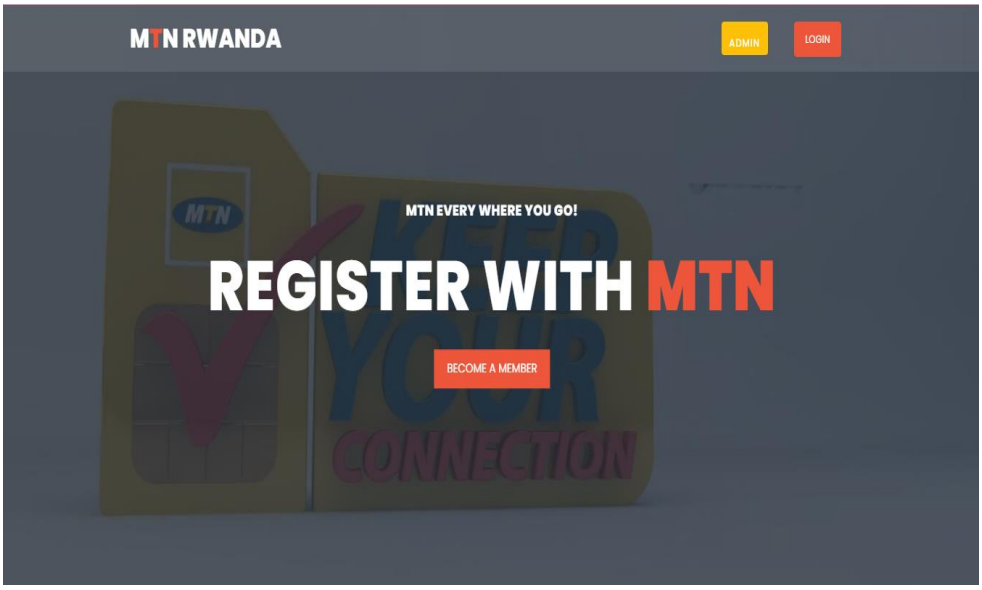
	id [PK] integer	email character varying (255)	password character varying (255)	username character varying (255)
4	4	princemugabe568@g...	Clairi04	admin
5	5	princemugbe89@gmail...	3456	fanny
6	6	princemu456@gmail.c...	1234567890	kisha
7	7	kishaclai05@gmail.com	123456	kishaclaire
8	8	princemu568@gmail.c...	12345	steve
9	9	princemugbe568@gm...	gvmn	claire

Client



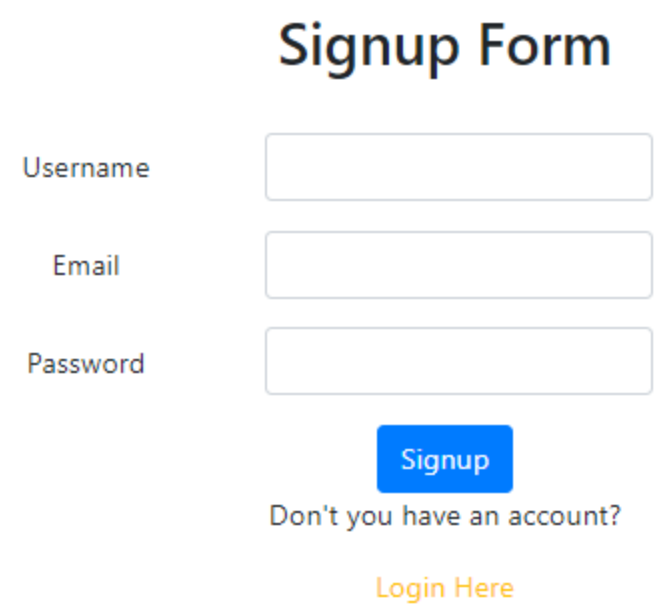
Home page

The red button is for user and yellow Button is for Admin



Login for client

Sign up for client



BACK

USERS LIST

ID	National ID	First name	Last name	Email	Photo	Created On	Updated On	Action
8	123456789	Claire	KISHA	kishaclaire04@gmail.com	[B@6fe743ed	2023-05-17T20:21:41.791114	2023-05-17T20:21:41.792114	Edit Delete
9	46586456453135	tumu	cyubahiro	tumucyubahiro05@gmail.com	[B@511ba793	2023-05-17T20:22:27.519145	2023-05-17T20:22:27.519145	Edit Delete

Done by KWIZERA Claire

ID: 23688

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