

PROJECT REPORT

Oluwaseun Otoki

Table of contents

Brief overview of the design-----	4
Implementation details including-----	5
- names of modules that you have written-----	5
- technologies used-----	5
- special features-----	5
- screenshots of the output-----	6
Conclusion-----	16
References-----	17

Brief overview of the design

This design is a platform that aims at improving the efficiency of the electricity distribution company in Nigeria by digitalizing the billing system and how they interact with the electricity consumers. The application will also create a template for an app that will be installed on customers device to monitor the operations of the electricity distribution company. In a situation where there is no stable electricity supply, and even when you are fortunate to have power, nobody knows what will happen in the next few hours. I believe that even if we cannot have a 24 hour stable electricity like some developed countries, at least we (the customers) should be able to maximize the little megawatts to our advantage. We should be able to know what will happen in the next few hours. We should be able to know when electricity will be seized or restored, so we can plan our time and be more productive. For instance, If I know that power will be seized from morning to afternoon today, then there's no point waiting for it. I just look for other things that does not require power, and then come back for the power related stuffs in the afternoon. The original idea was to do a mobile app that will be installed on customers device, so each customer can monitor from their handheld devices, but for the purpose of this class, I will be creating a desktop app that will be a model to the mobile app.

Implementation details including

- names of modules that I have written

Lagos Power E-Platform is a desktop application for the Lagos Power Distribution Company. It has two major sections - the admin and the customers section,

- technologies used

The technology used are Java, JDBC and MySQL

- special features

Admin Features

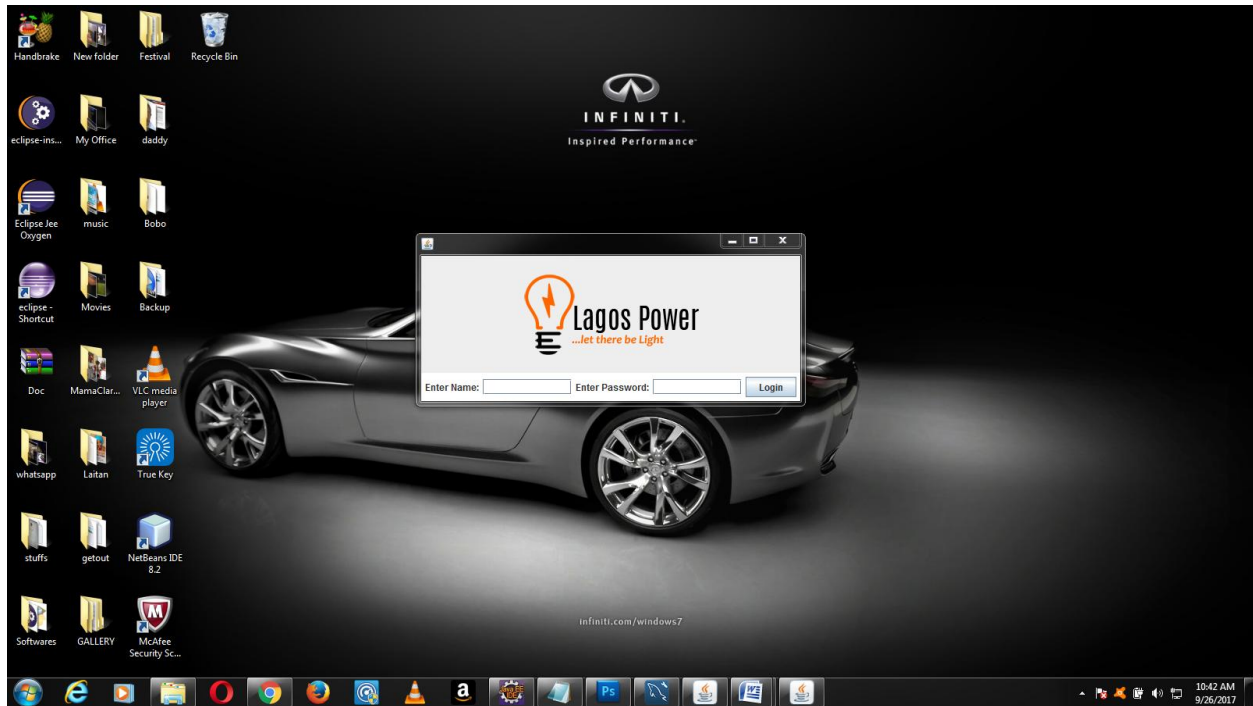
- Ability to create customers account and assign them to the national grid
- Schedule how electricity is distributed across a specified geographical locations. Specify what location gets electricity, at certain date, and for how many hours
- Ability to send messages to inform customers about certain repairs going on any facility, which ofcourse could lead to any power outages
- Ability to enter customer's meter readings and use to compute customer's billing
- Ability to sort out customer's with outstanding payments, and send a reminder message to them via messages

Customers Features

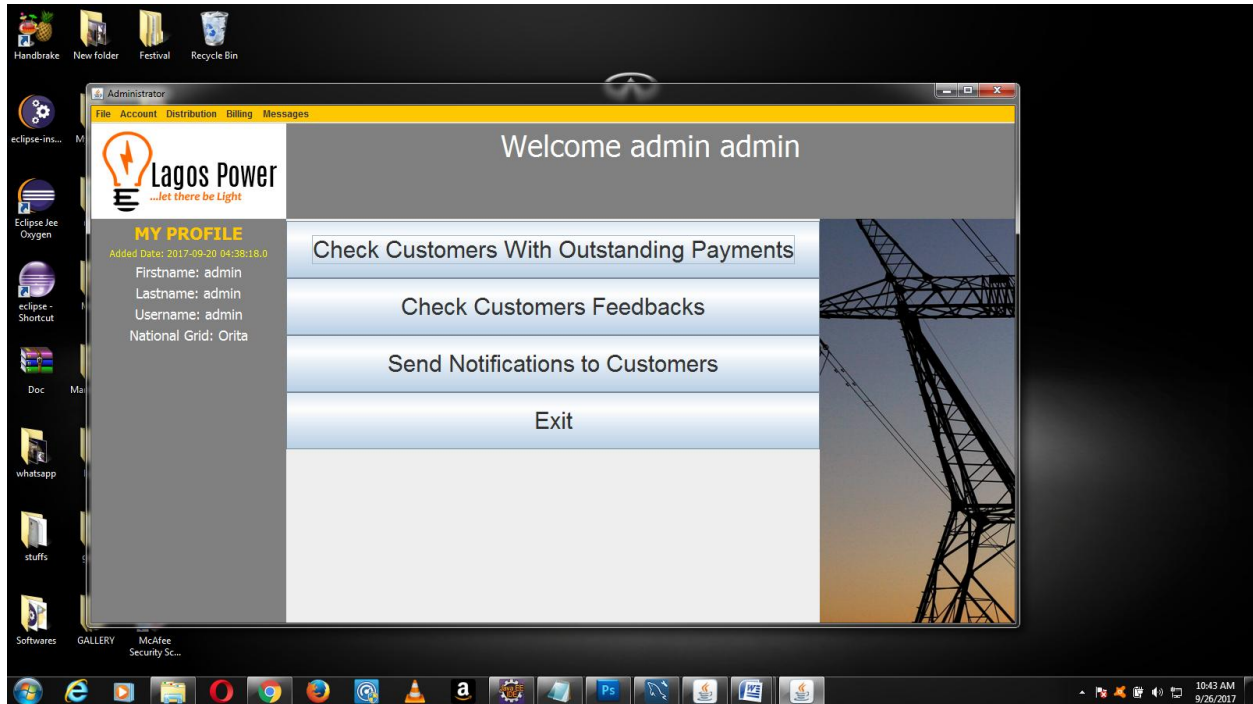
- Ability to check when power will be seized, and/or restored.
- Ability to check power status of other national grids
- Get notified of any repairs going on any of the electrical facilities, that may affect the power supply to your area
- Ability to view your billing from your dashboard
- Ability to report any issues, like damaged facilities or electrical issues to the electricity distribution company

- screenshots of the output for the admin section

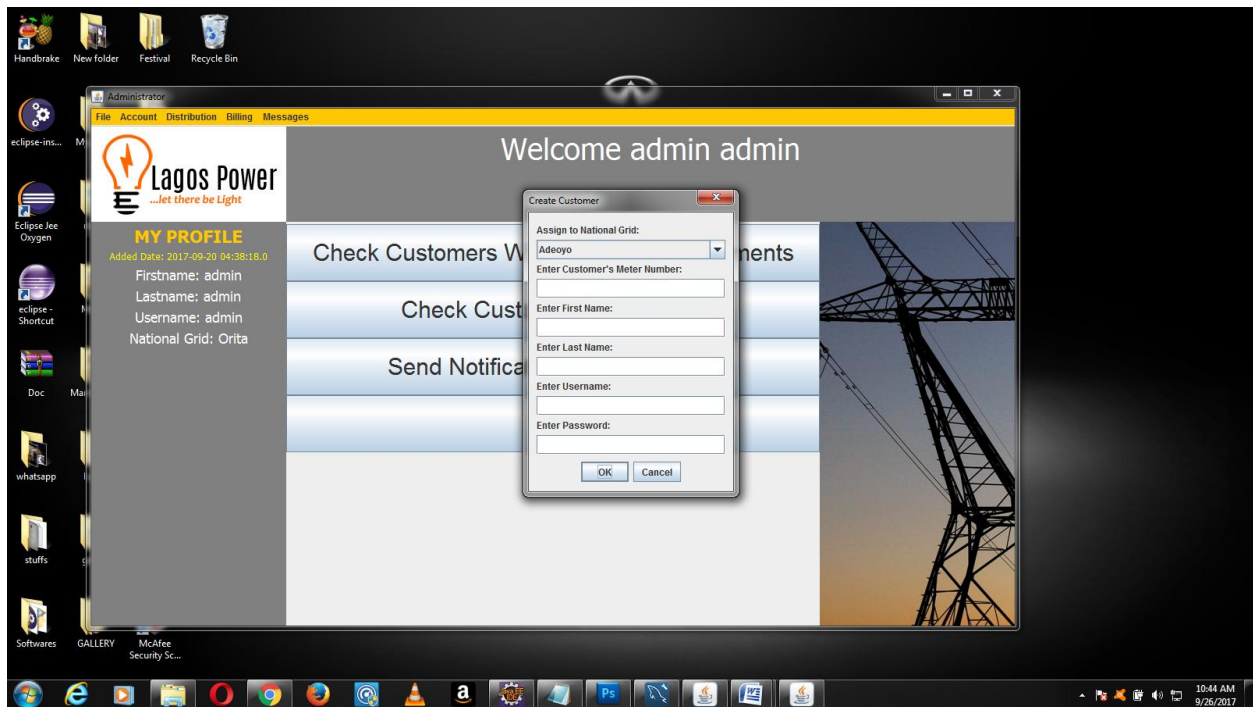
Login Screen



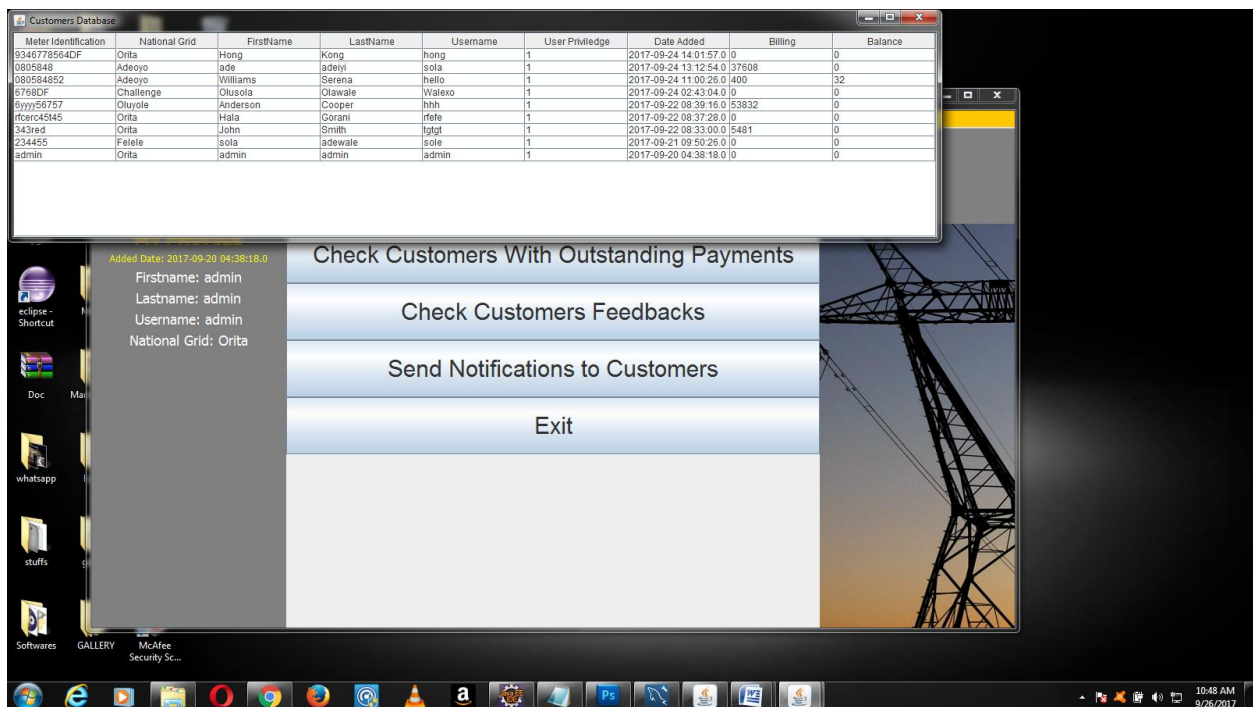
Admin Dashboard



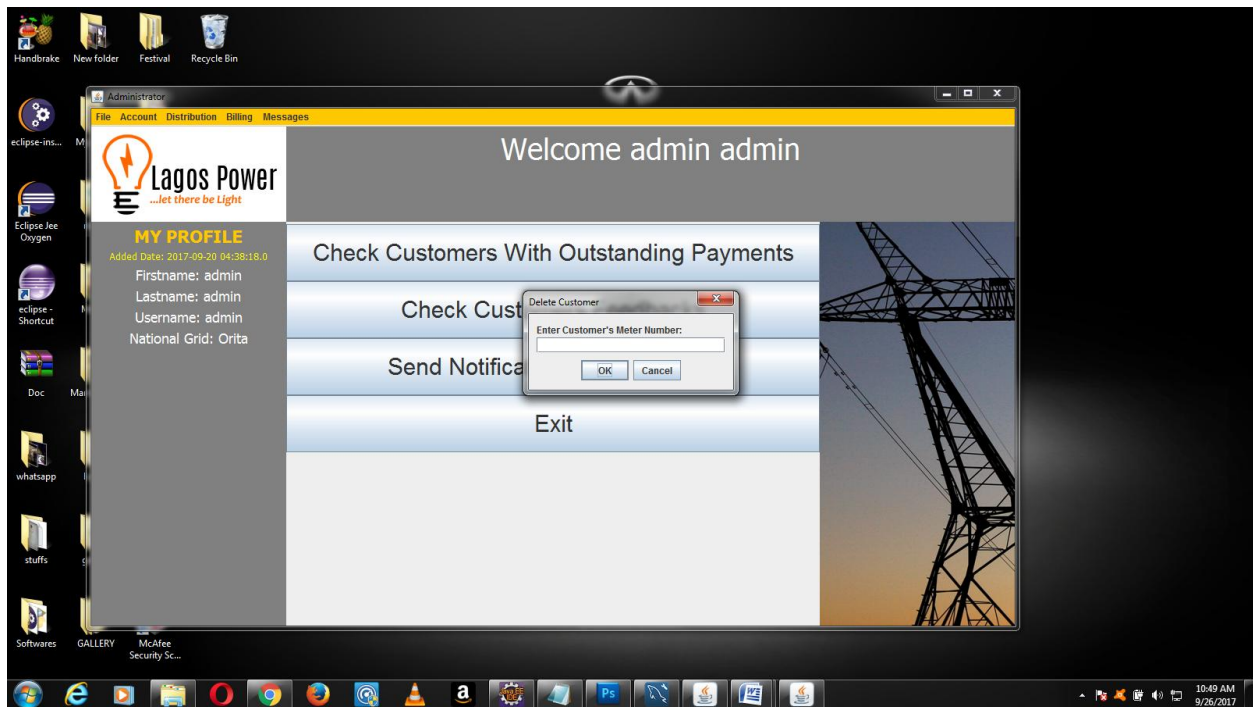
Create Customer



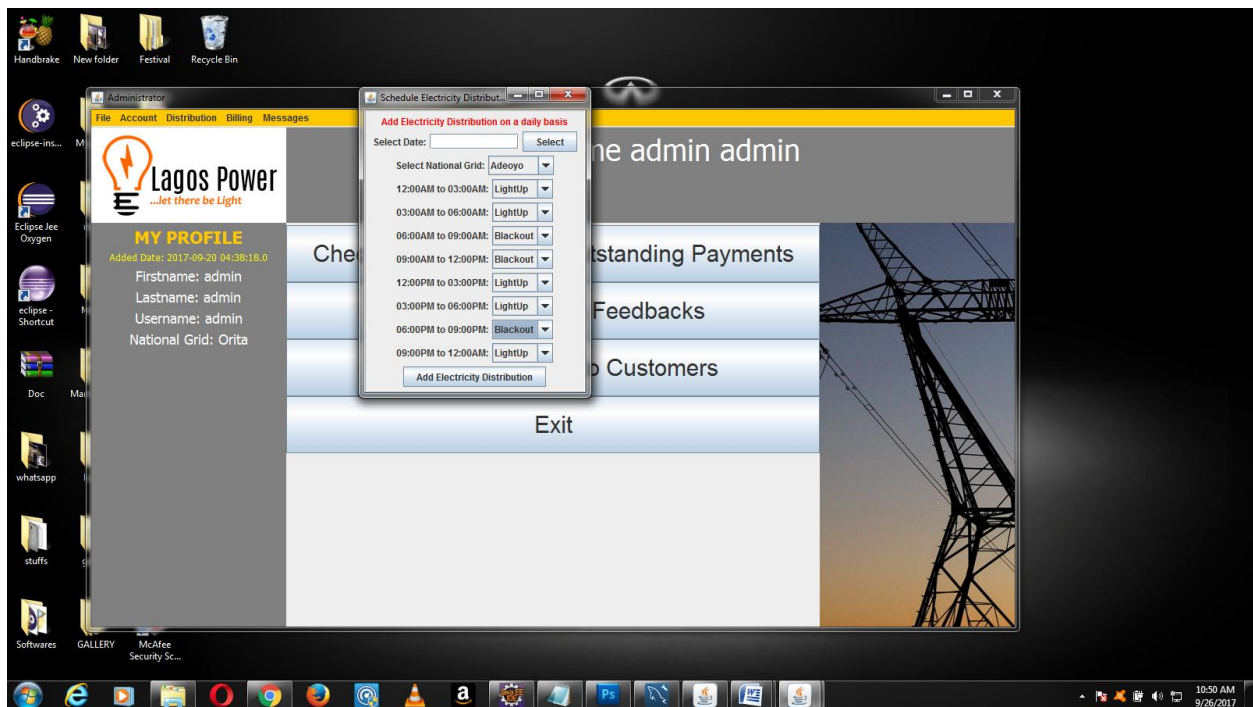
View Customers



Delete Customers

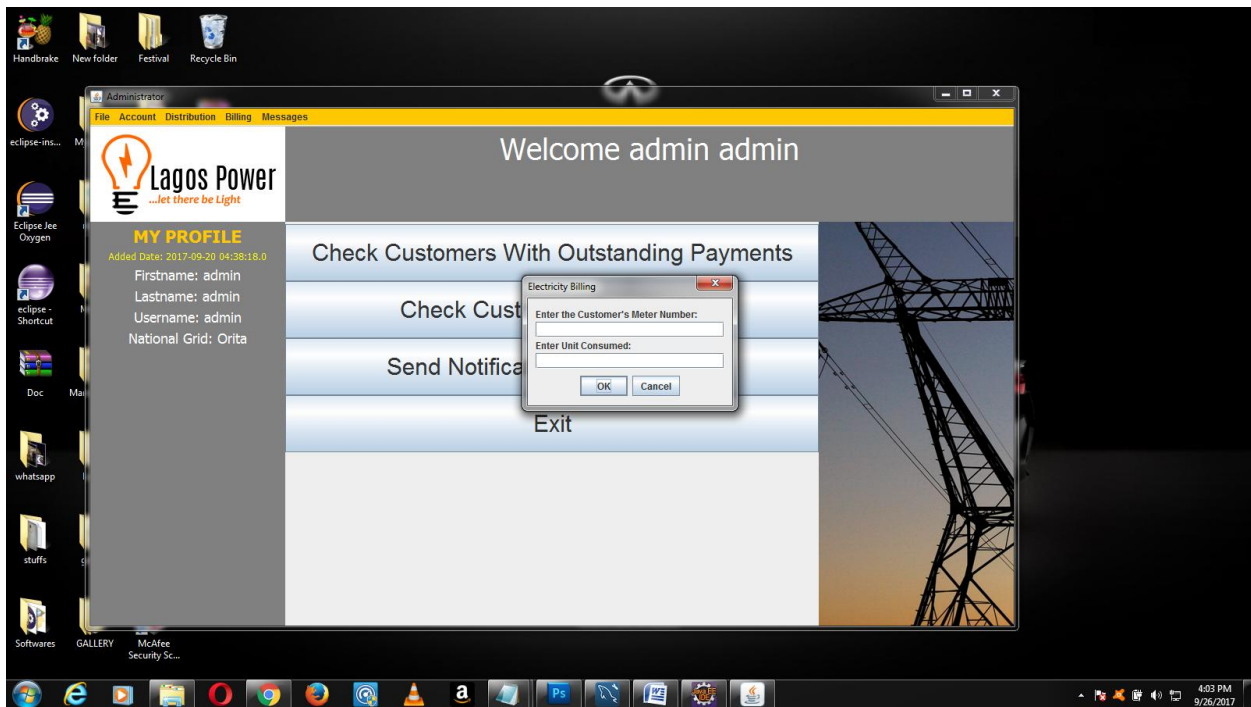


Schedule Electricity

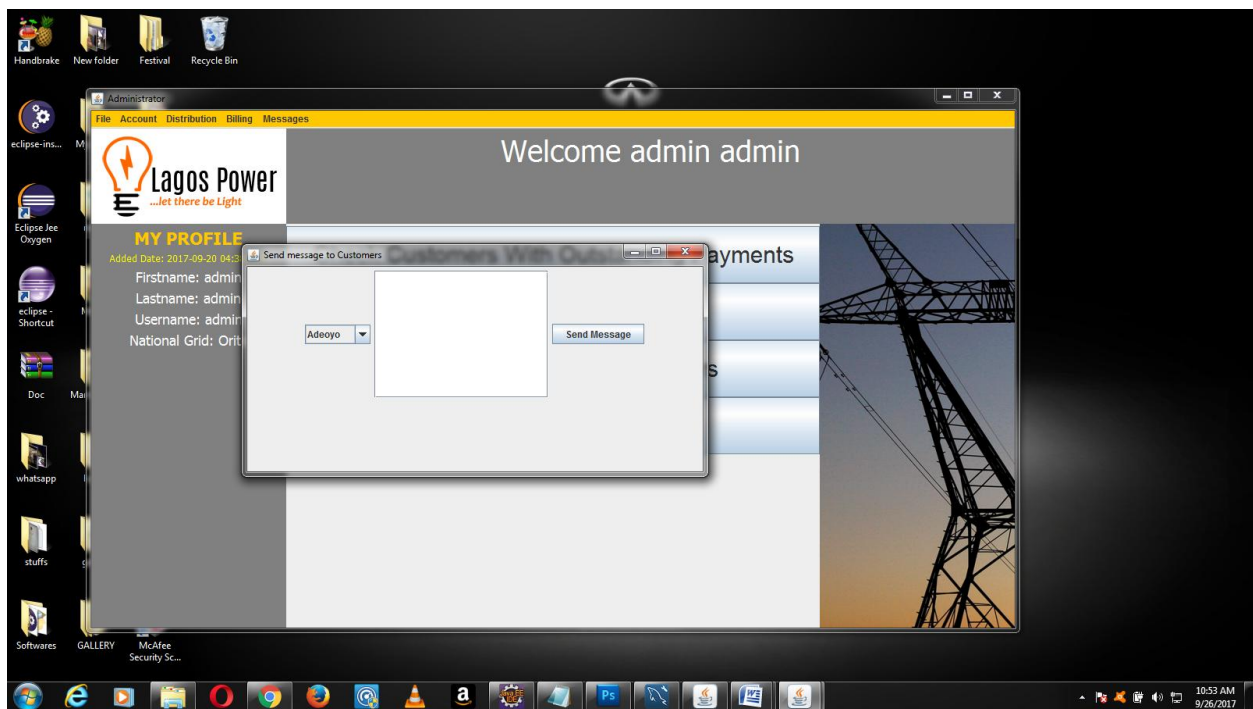


[View Scheduled Electricity](#)[illegible]

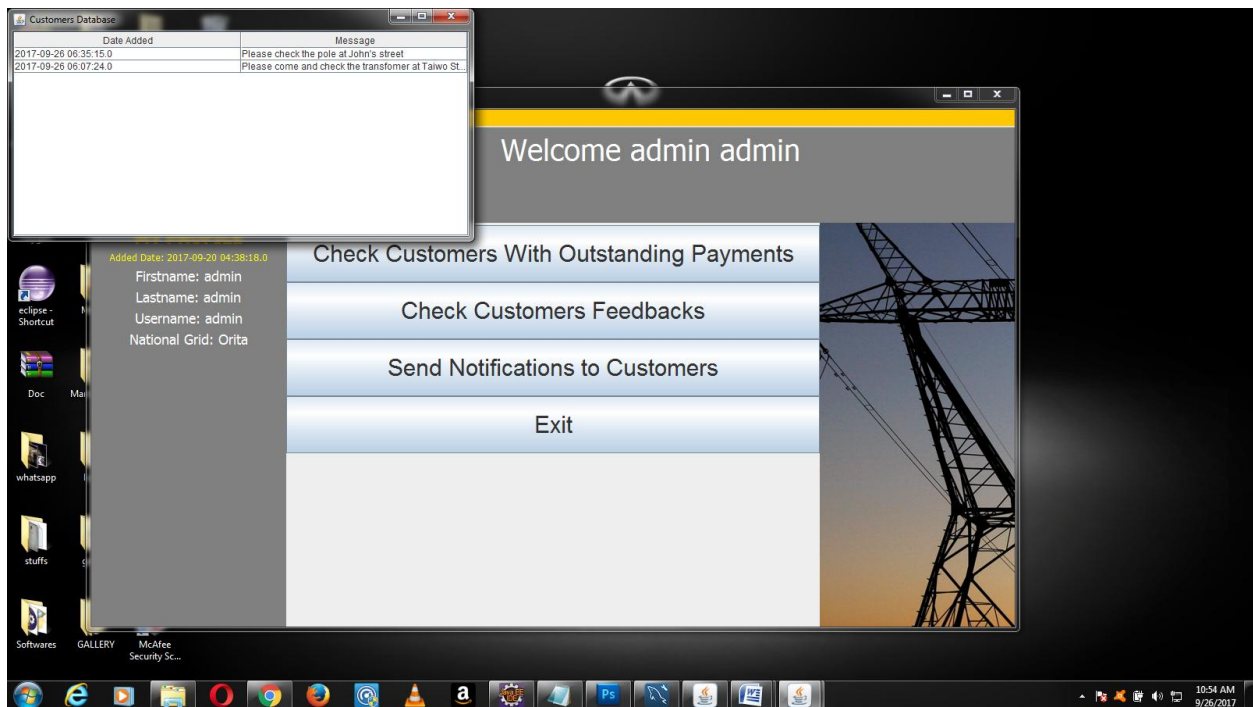
Electricity Billing



Send Message to Customers

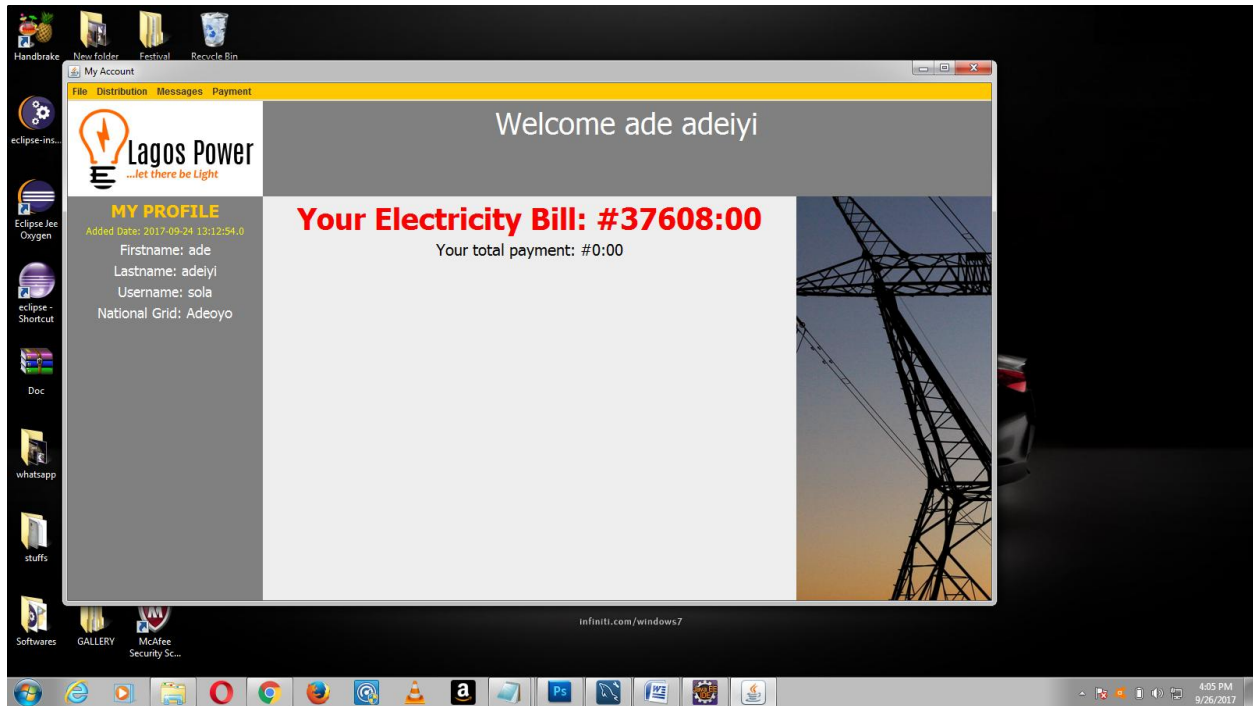


Read Customers' Messages



- screenshots of the output for the customer's section

Customer's Dashboard



View Schedule from the Customer's section

Electricity Distribution Schedule

Date	National Grid	12AM to 03AM	03AM to 06AM	06AM to 09AM	09AM to 12PM	12PM to 03PM	03PM to 06PM	06PM to 09PM	09PM to 12AM
25-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp
24-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp
22-09-2017	Adeoyo	LightUp	Blackout	LightUp	Blackout	LightUp	LightUp	LightUp	LightUp
21-09-2017	Oluyole	LightUp	Blackout	LightUp	Blackout	LightUp	LightUp	LightUp	LightUp
20-09-2017	Adeoyo	LightUp	Blackout	LightUp	Blackout	LightUp	LightUp	LightUp	LightUp
19-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp
18-09-2017	Adeoyo	Blackout	Blackout	LightUp	Blackout	LightUp	Blackout	LightUp	LightUp
17-09-2017	Adeoyo	Blackout	Blackout	LightUp	Blackout	LightUp	Blackout	LightUp	Blackout
16-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp
15-09-2017	Adeoyo	LightUp	LightUp	Blackout	LightUp	LightUp	LightUp	Blackout	LightUp
14-09-2017	Adeoyo	LightUp	Blackout	Blackout	LightUp	LightUp	LightUp	LightUp	LightUp
13-09-2017	Adeoyo	Blackout	Blackout	Blackout	Blackout	LightUp	LightUp	Blackout	LightUp
12-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	Blackout	LightUp	LightUp
12-09-2017	Adeoyo	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp	LightUp
11-09-2017	Adeoyo	Blackout	Blackout	Blackout	LightUp	LightUp	LightUp	LightUp	LightUp

Firstname: ade
Lastname: adeiyi
Username: sola
National Grid: Adeoyo

Your total payment: #0:00

Send Messages to Admin

My Account

File Distribution Messages Payment

Welcome ade adeiyi

Lagos Power
...let there be Light

MY PROFILE
Added Date: 2017-09-24 13:12:54.0

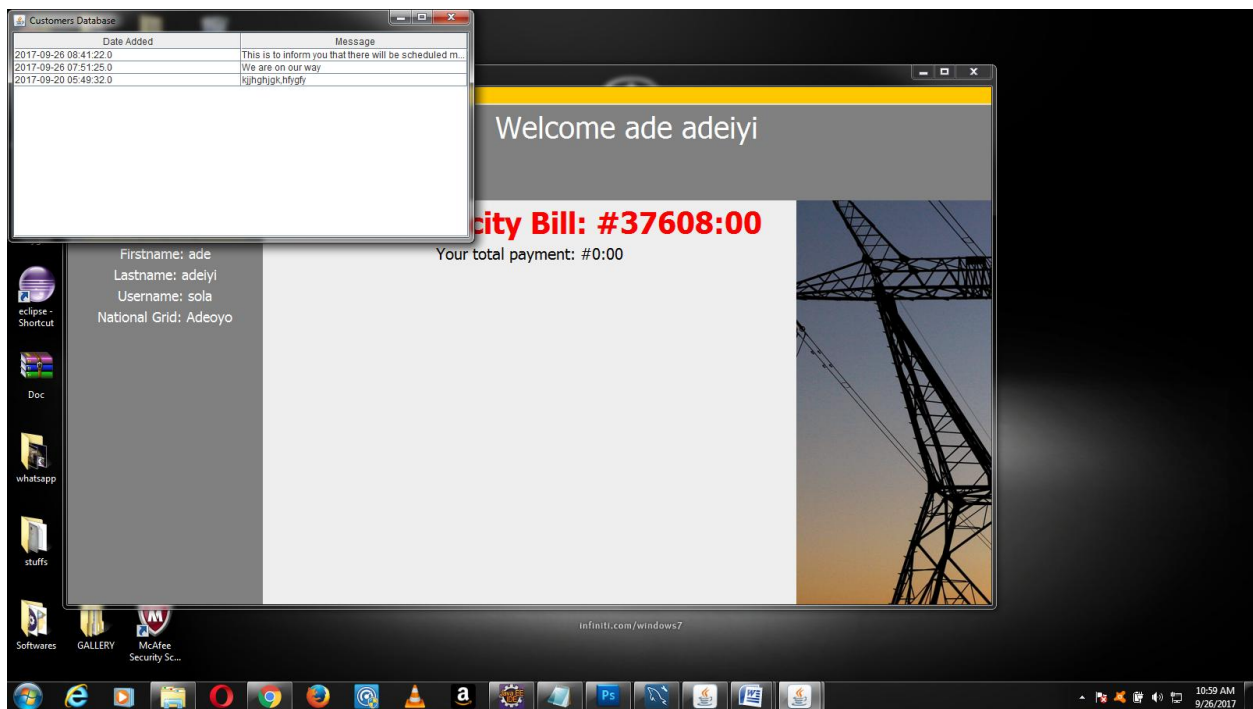
Firstname: ade
Lastname: adeiyi
Username: sola
National Grid: Adeoyo

Your Electricity Bill: #37608:00

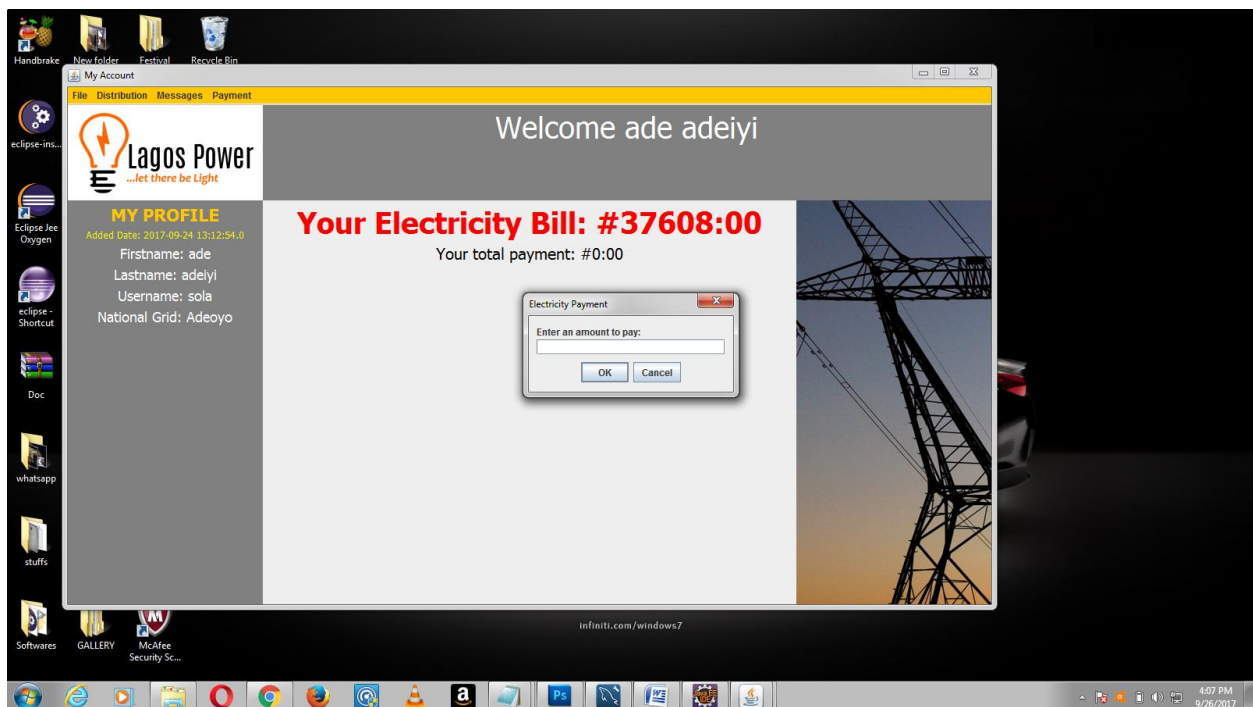
Send message to Admin

Admin [v]
[Send Message]

Read Messages from Admin



Make Payments



Conclusion

It's been fun working with Graphical User Interface and JDBC. So many features were jumping at me, but time will not permit me to include as many features as possible.

References

Programming with Java - A Multimedia Approach by Radhika S. Grover.

<https://stackoverflow.com/>