PROJECT REPORT

Oluwaseun Otoki

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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

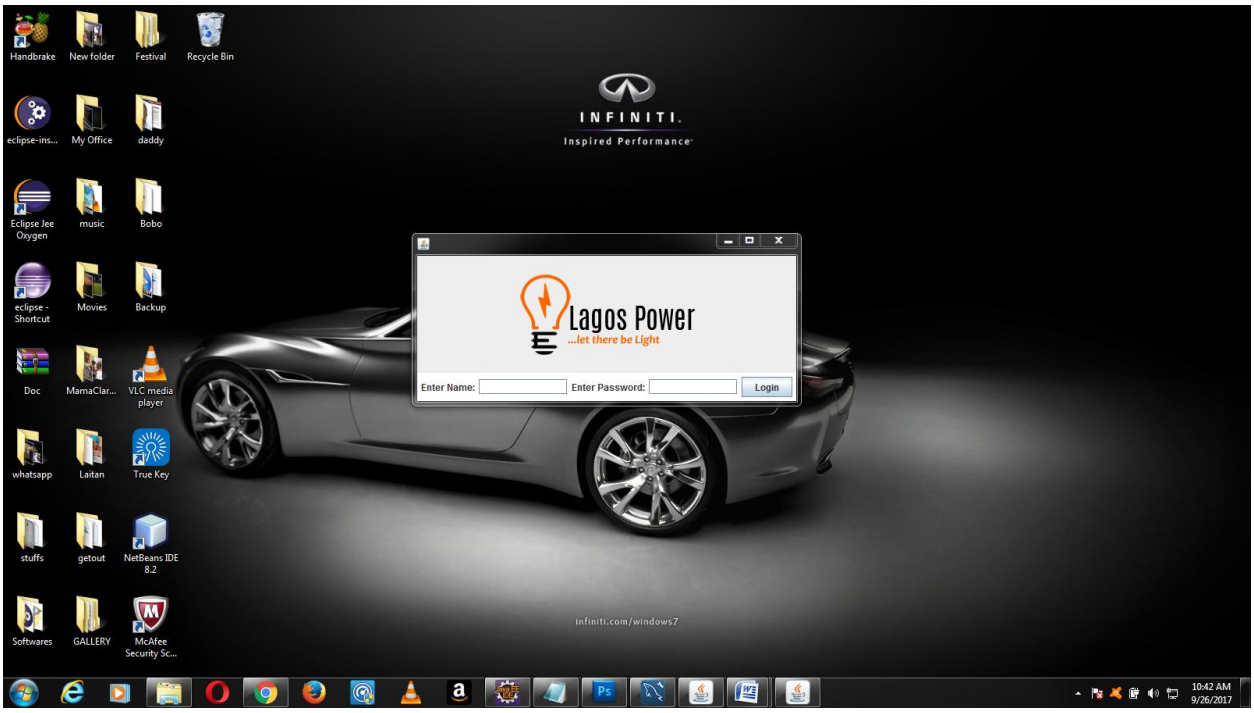
- Ability to create customers account and assign them to the national grid
- Schedule how electricity is distributed across a specified geographical locations. Specify what location gets electricity, at certain date, and for how many hours
- Ability to send messages to inform customers about certain 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

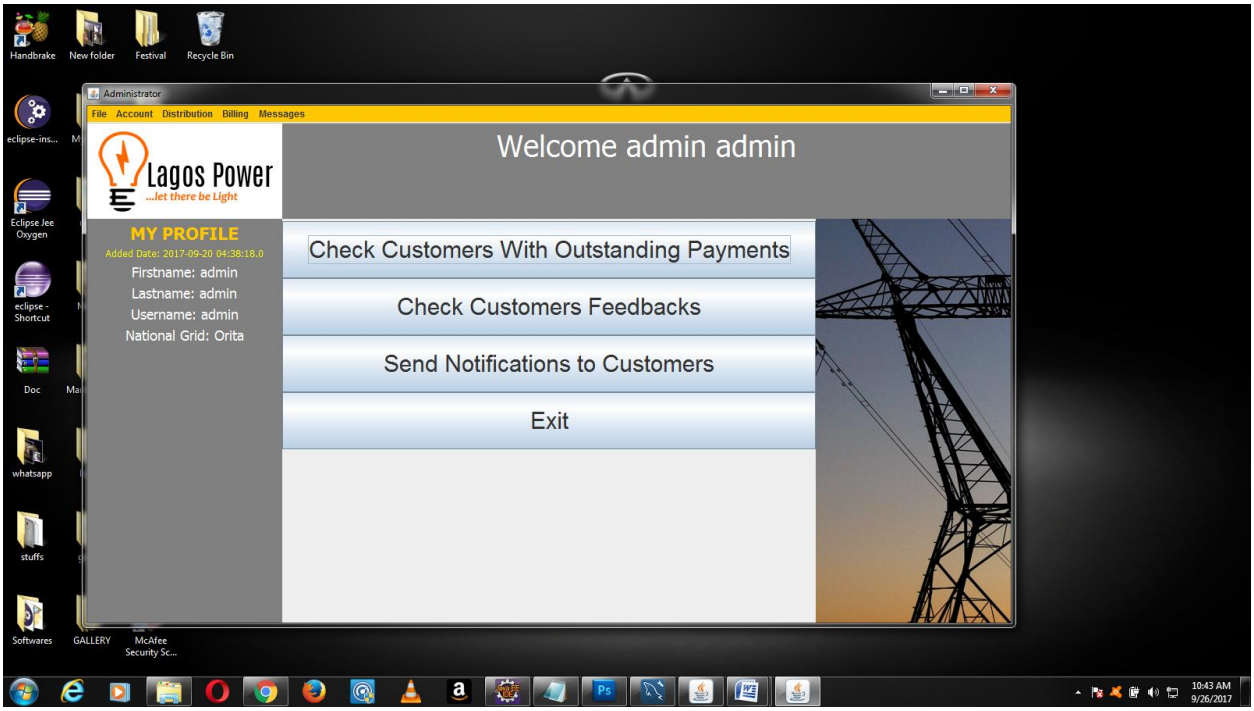
- Ability to check when power will be seized, and/or restored.
- Ability to check power status of other national grids
- Get notified of any repairs going on any of the electrical facilities, that may affect the power supply to your area
- Ability to view your billing from your dashboard
- Ability to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

- screenshots of the output for the admin section

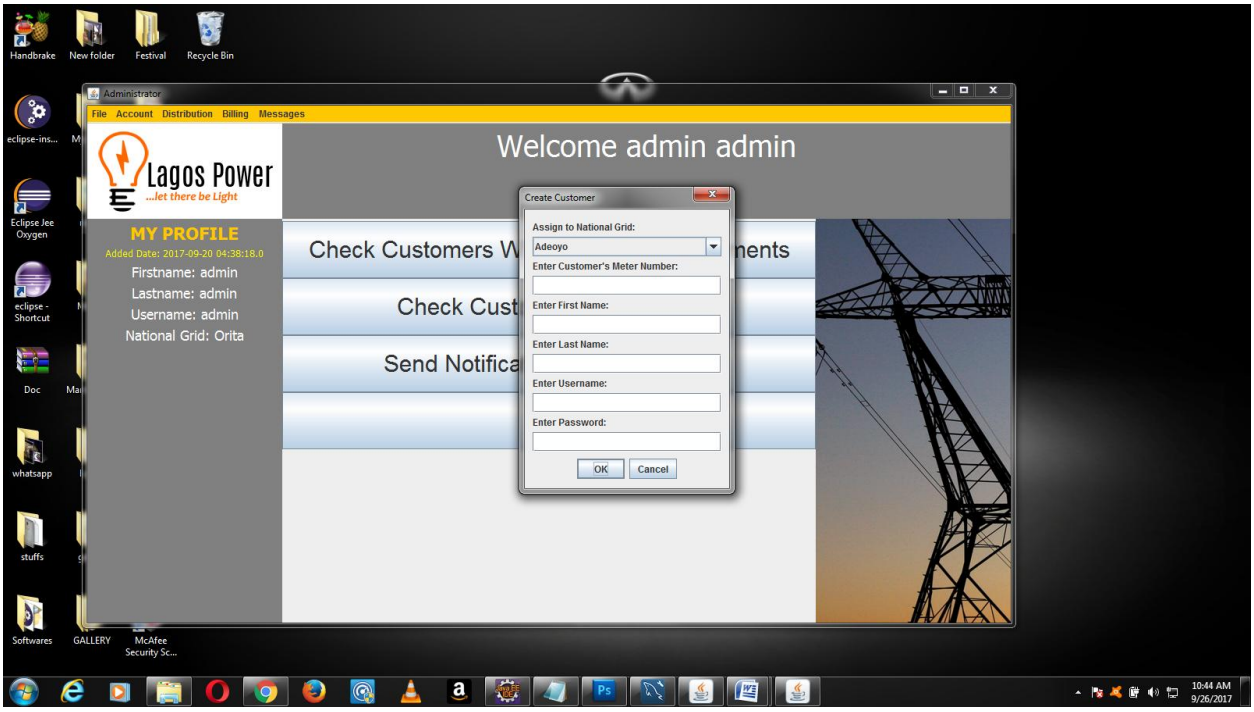
Login Screen



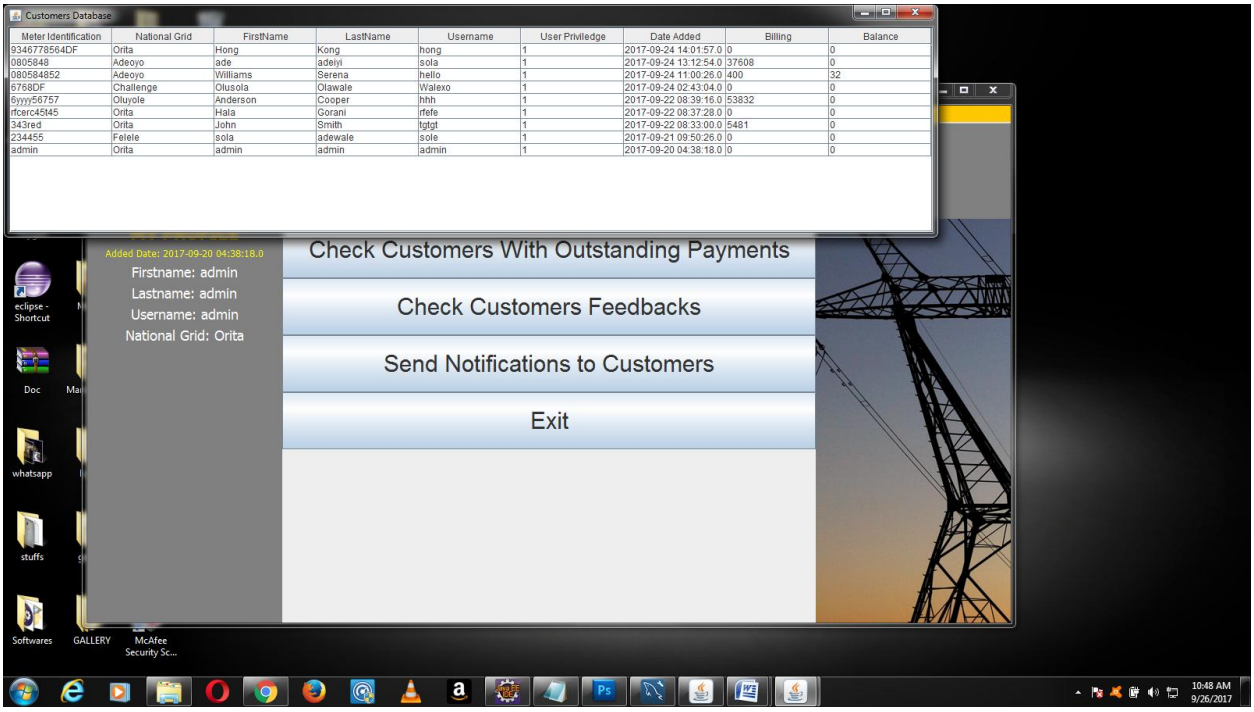
Admin Dashboard



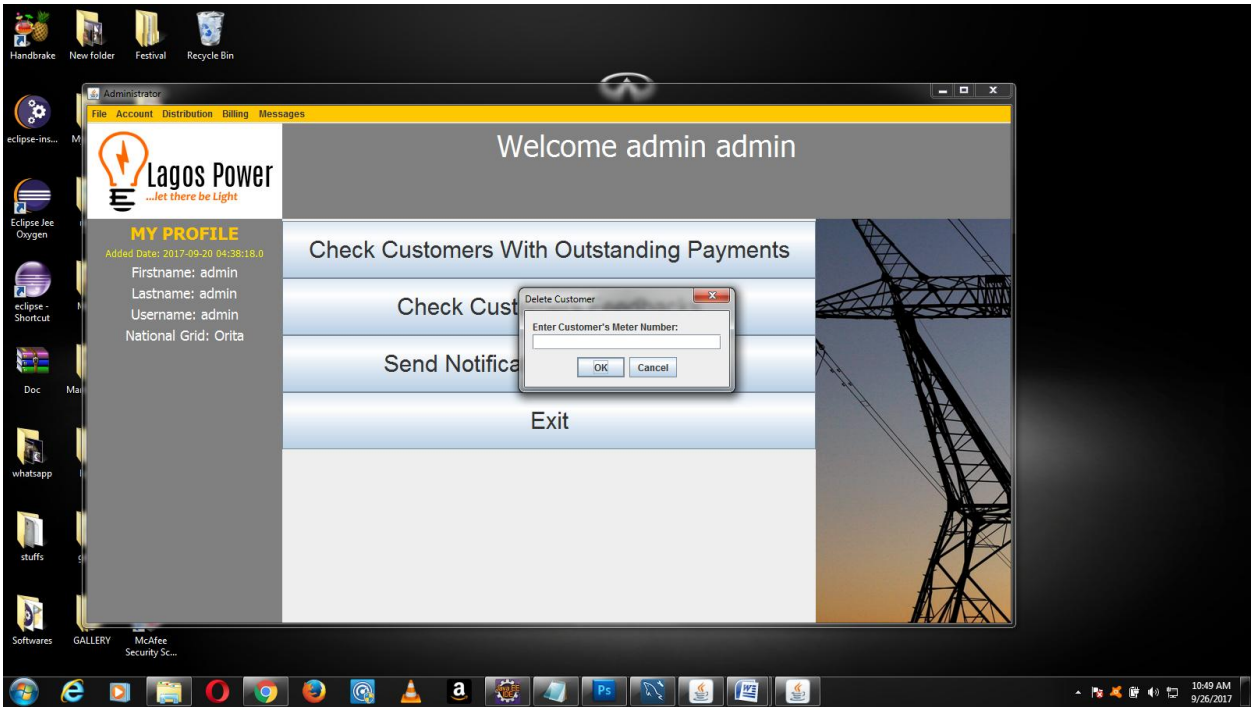
Create Customer



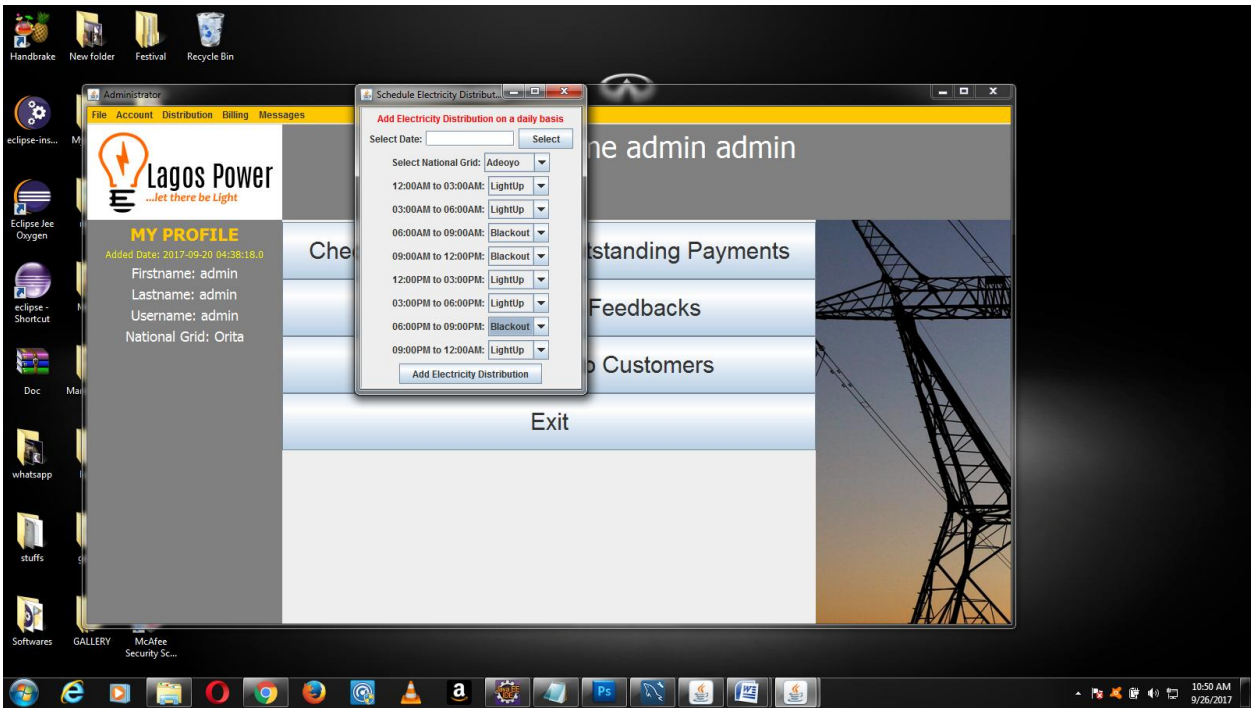
View Customers



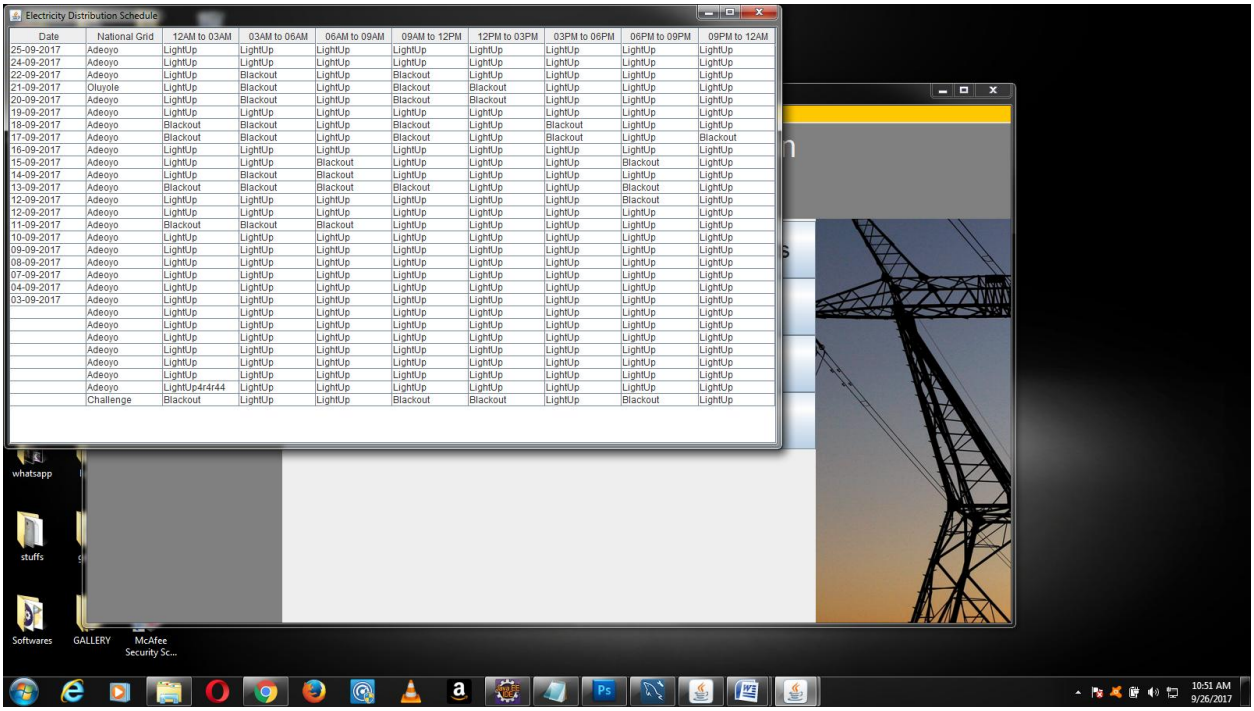
Delete Customers



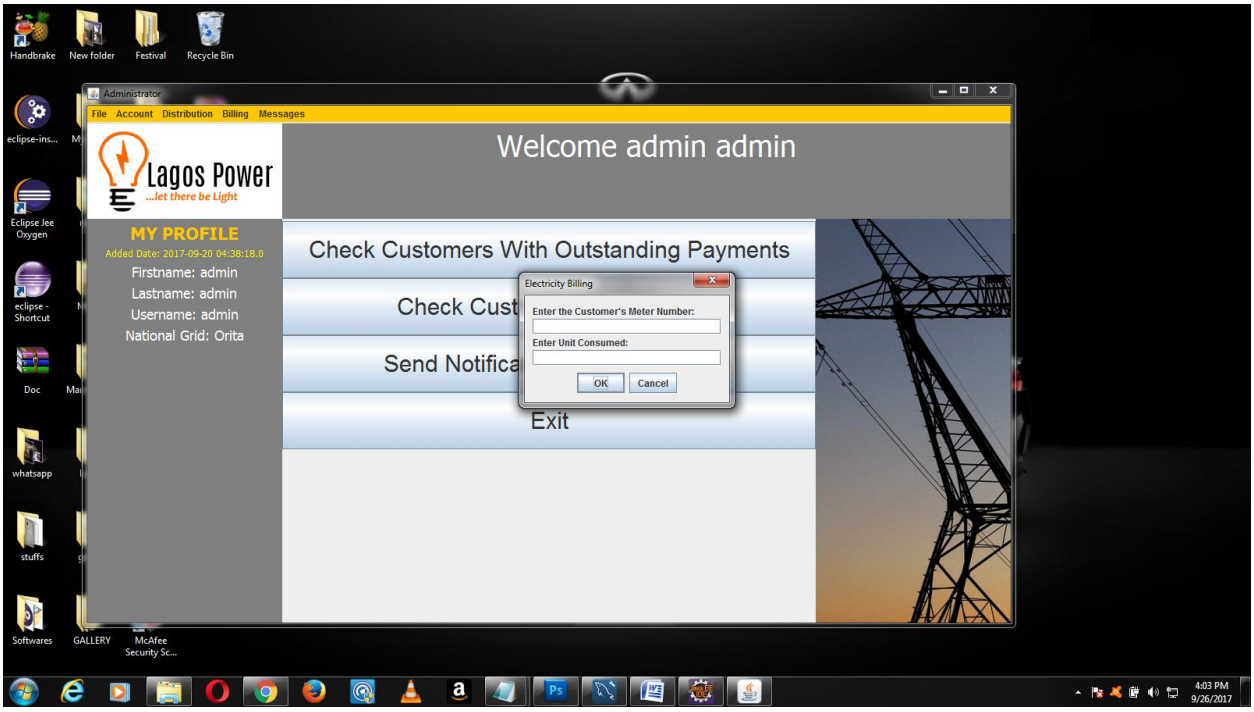
Schedule Electricity



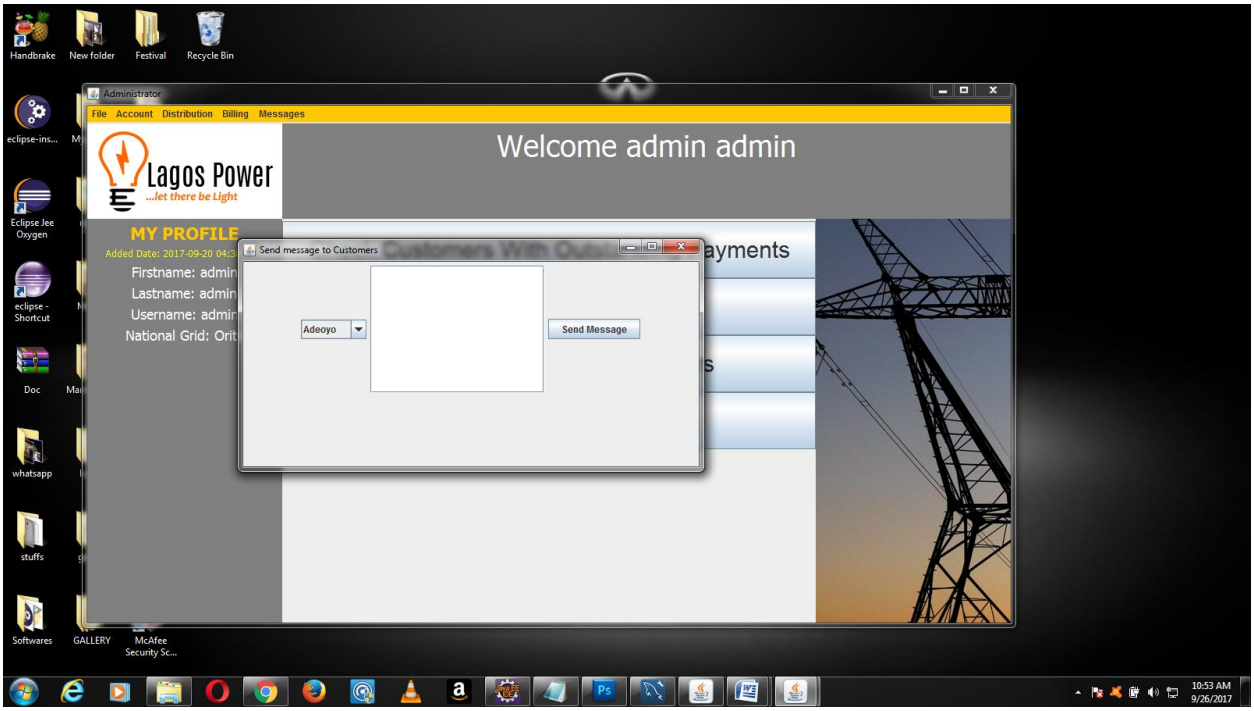
View Scheduled Electricity



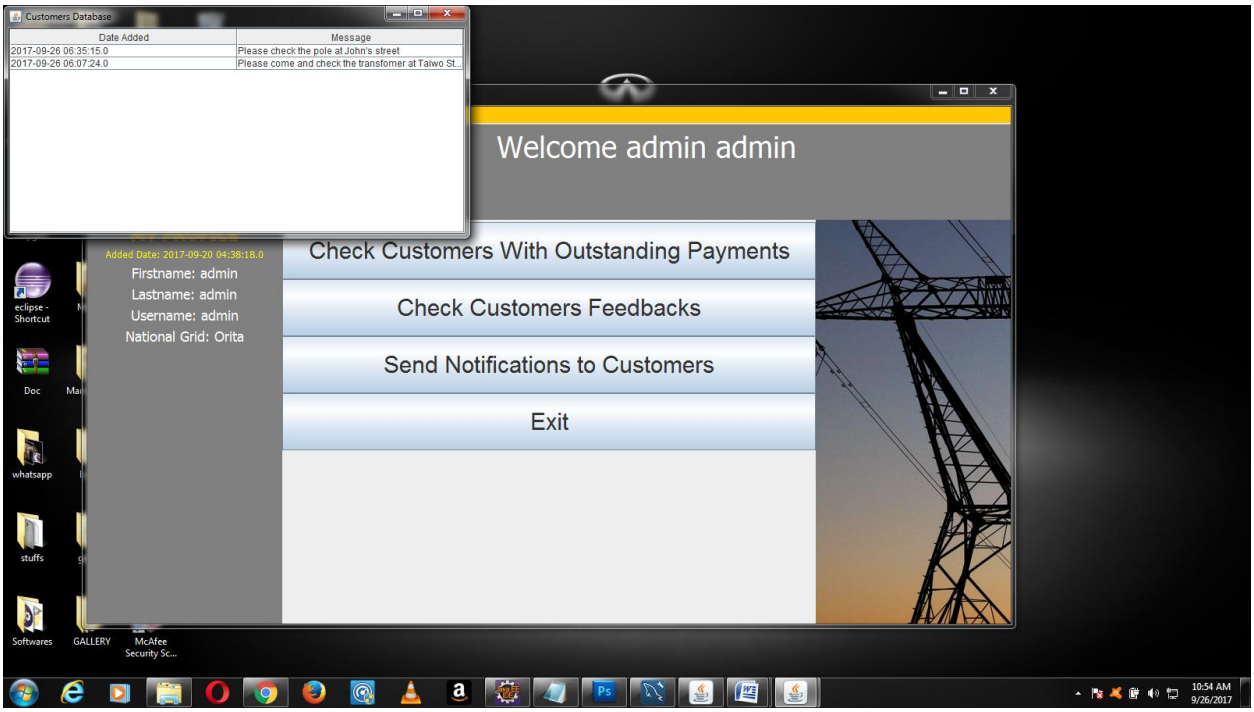
Electricity Billing



Send Message to Customers

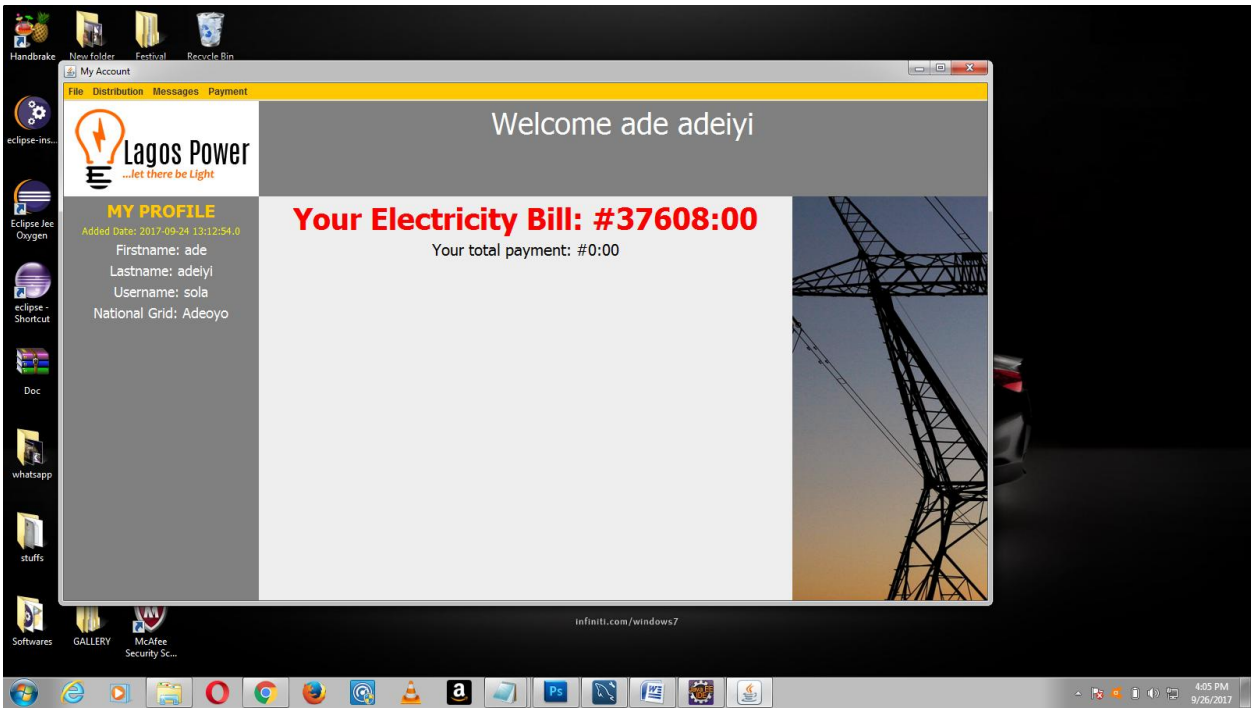


Read Customers' Messages

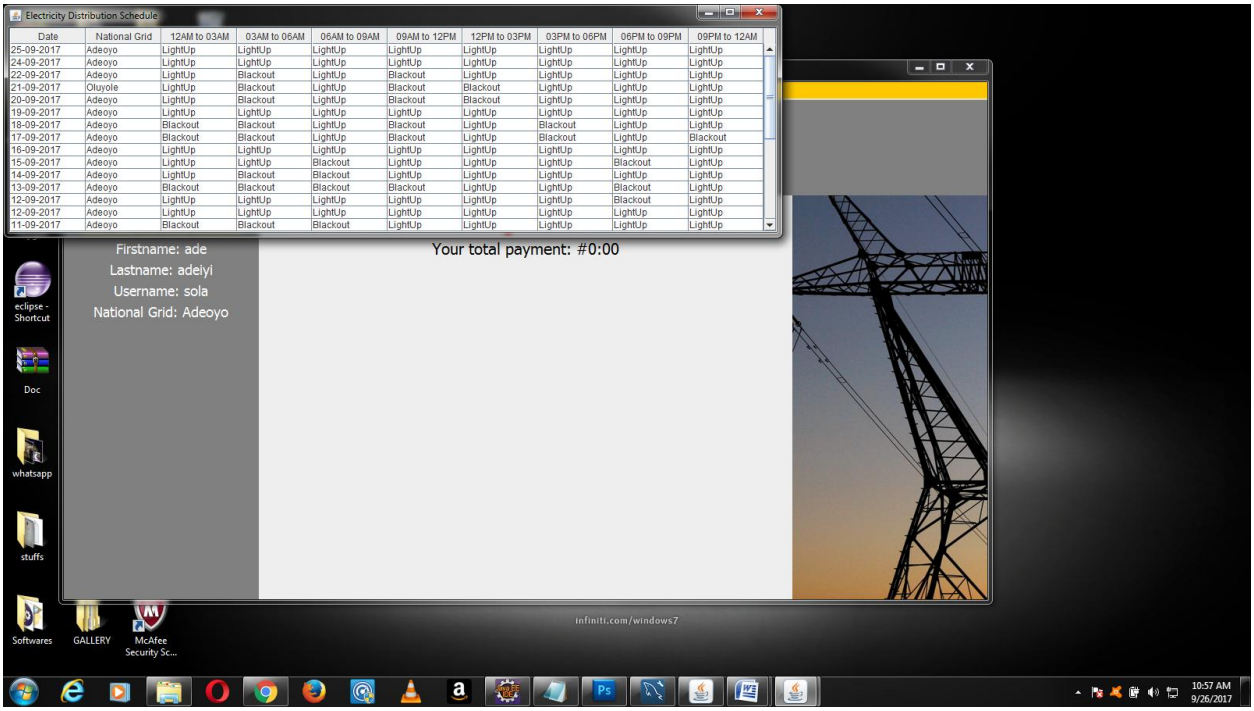


- screenshots of the output for the customer's section

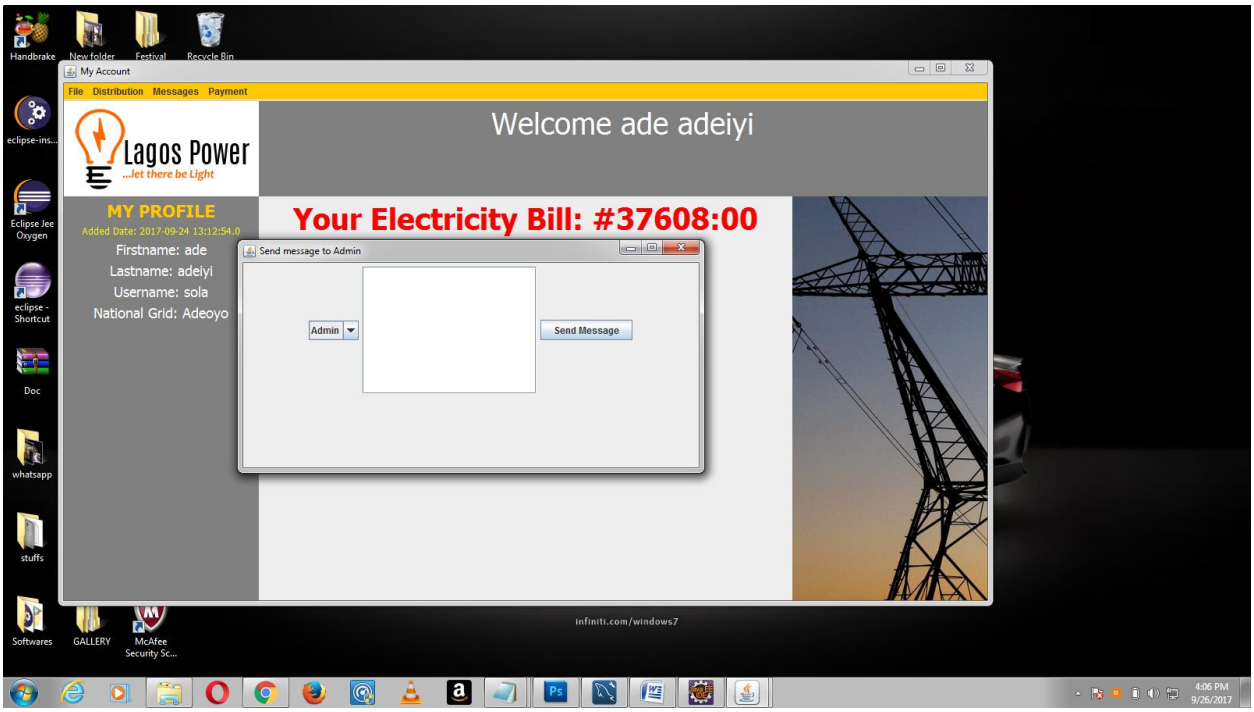
Customer's Dashboard



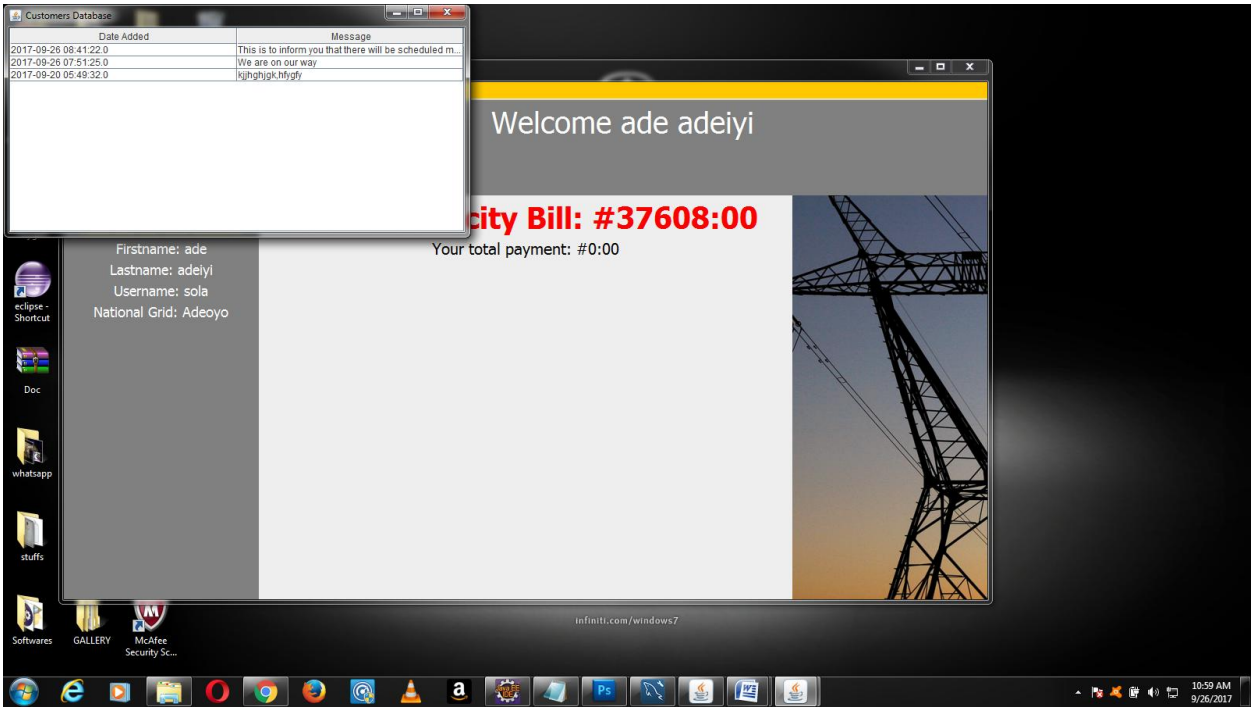
View Schedule from the Customer's section



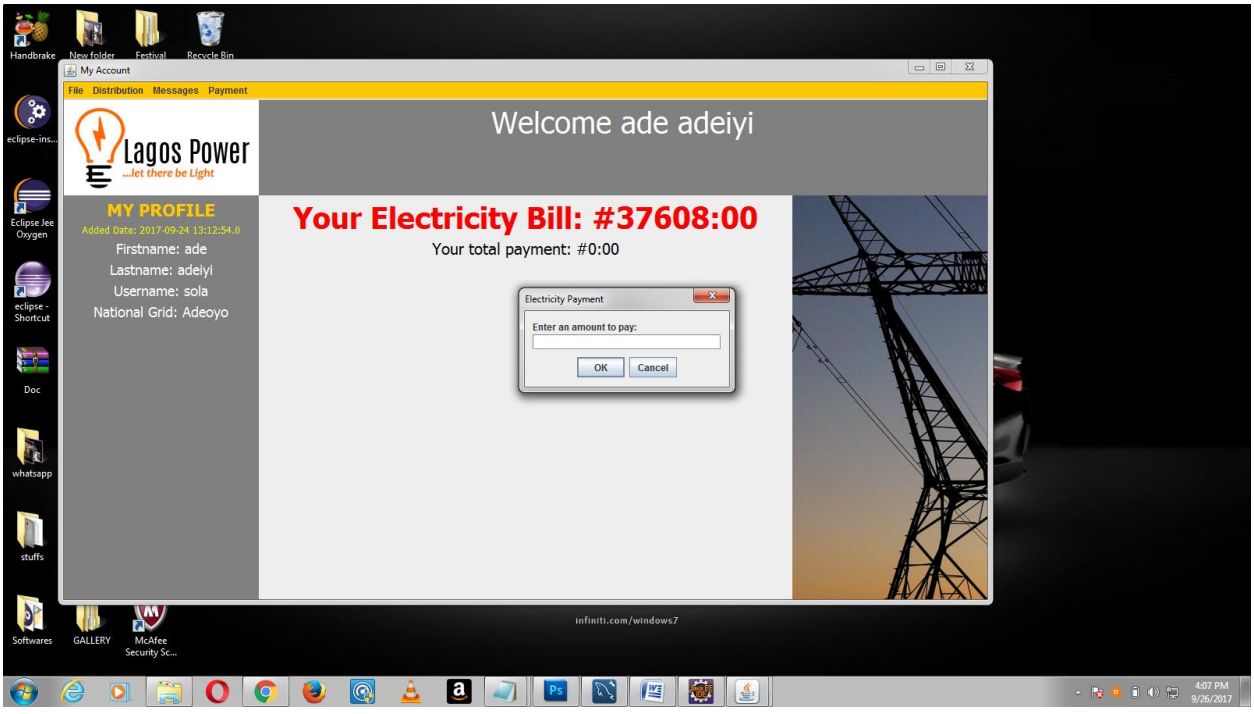
Send Messages to Admin



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/