Department of Computer Science and Engineering

Institute of Engineering and Technology (IET)

JK Lakshmipat University,Jaipur

July 2022

Object Oriented Programming (CS1101)

Course Project Report

On

"University Admission System"

Team Members:

1. Pranshu Kumar Mishra (2021Btech87)
2. Lucky Jindal (2021Btech067)
3. Nikhil Kumar Agrawal (2021Btech077)
4. Rahul Chaudhary (2021Btech093)

Faculty Guide:

Mr. Devendra Bhavsar
Assistant Professor
Institute of Engineering & Technology

ACKNOWLEDGEMENT

We have completed this project under the guidance and supervision of **Mr. Devendra Bhavsar (Assistant Professor, Computer Science Engineering Department, Institute of Engineering and Technology JK Lakshmipat University Jaipur)**. We will be failed in my duty if I do not acknowledge the esteemed scholarly guidance, assistance and knowledge. We have received from them towards fruitful and timely completion of this work.

Our acknowledgement may not redeem the debt we owe to our parents for their direct/indirect support during the entire course of this project.

We also thank our colleagues who have helped in successful completion of the project.

Table of Content

Introduction

The project on **"University Admission System"** has been given to us as a part of the Course project in **Object Oriented Programming (CS1101)** in Second Semester. We have tried our best to make the complicated process of University Admission System as simple as possible using Structured & Modular technique& Menu oriented interface.

We have tried to design the software in such a way that user may not have any difficulty in using this software & further expansion is possible without much effort. Even though we cannot claim that this work to be entirely exhaustive, the main purpose of our exercise is performing each User and Admin's activity in computerized way rather than manually which is time consuming.

We are confident that this Software can be readily used by non-programming personal avoiding human handled chance of error.

Administrator can maintain daily updates in the Application records. Administrator mustbe an authorized user. He can further change the password. There is the facility for password also.

"University Admission System" has been designed to computerize the following functions that are performed by the system:

- ✓ User Account Feature
- ✓ Admin Account Feature
- ✓ User Sign-up Feature
- ✓ User Sign-in Feature
- ✓ User Sign-out Feature
- ✓ Admin Sign-in Feature
- ✓ Encrypted Password
- ✓ User info to Admin
- ✓ Bill Generation
- ✓ User Help & Support
- ✓ Application Status
- ✓ Captcha
- ✓ Forgotten Password

Chapter 1: Objective

During the past several decades' personnel function has been transformed from arelatively obscure record keeping staff to central and top-level management function. There are many factors that have influenced this transformation like technological advances, professionalism, and general recognition of human beings as most important resources.

- A computer-based management system is designed to handle all the primary information required to calculate the number of user. Separate database is maintained to handle all the details required for the admission process.
- This project intends to introduce more user friendliness in the various activities such as application status, knowing about program, and searching.
- The searching of record has been made quite simple as all the details of the user can be obtained by going to admin and click on the user name of that student.
- Similarly, application status and updating can also be accomplished by using the identification of the user with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record up to date.
- The entire information has maintained in the database or Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be easily accessible from the file.

The main objective of the entire activity is to automate the process of day-to-day activities of Admission like:

- ✓ Application form
- ✓ Admission of a Student
- ✓ Either accepting or rejecting it
- ✓ Select from various branch
- ✓ Information of the User
- ✓ Information of which branch user is interested
- ✓ Compute the bill etc.

Chapter 2 : Technologies Used

Front End:

- Java Swing (To create interactable design)

Back End:

- Java 18
- MySQL & XAMPP (To connect to Database)

Database Server:

- MySQL

IDE Used:

- Apache NetBeans 11.3

Constraints:

- User interface is only in English, i.e., no other language option is available.
- Admin can only login using the assigned ID and password, i.e., he/she cannot create a new ID or change his/her password.

Chapter 3: Data Flow Diagrams

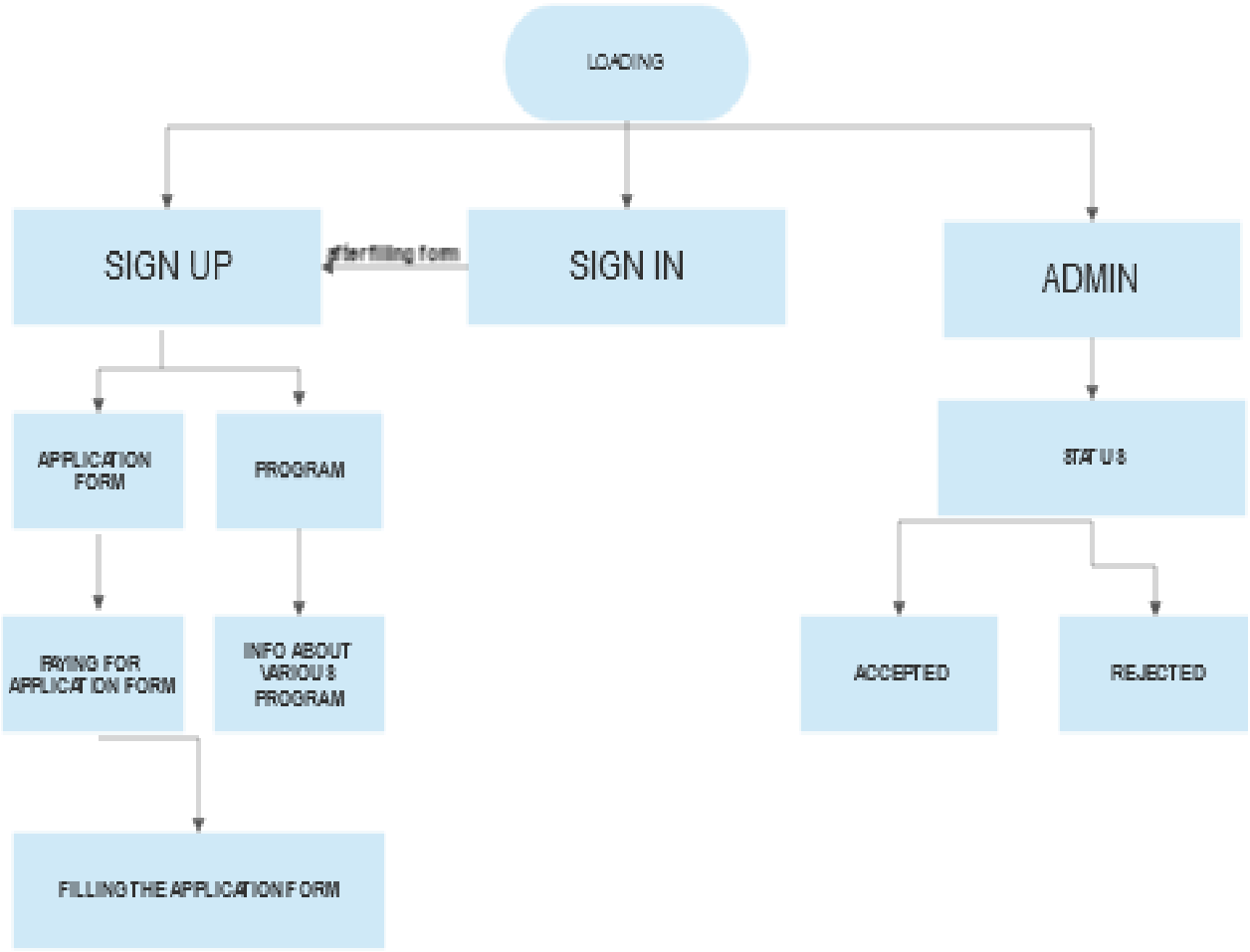

Fig: 3.1

Chapter 4: Screenshots of Forms

Sign up page

Fig: 4.1

Sign in page

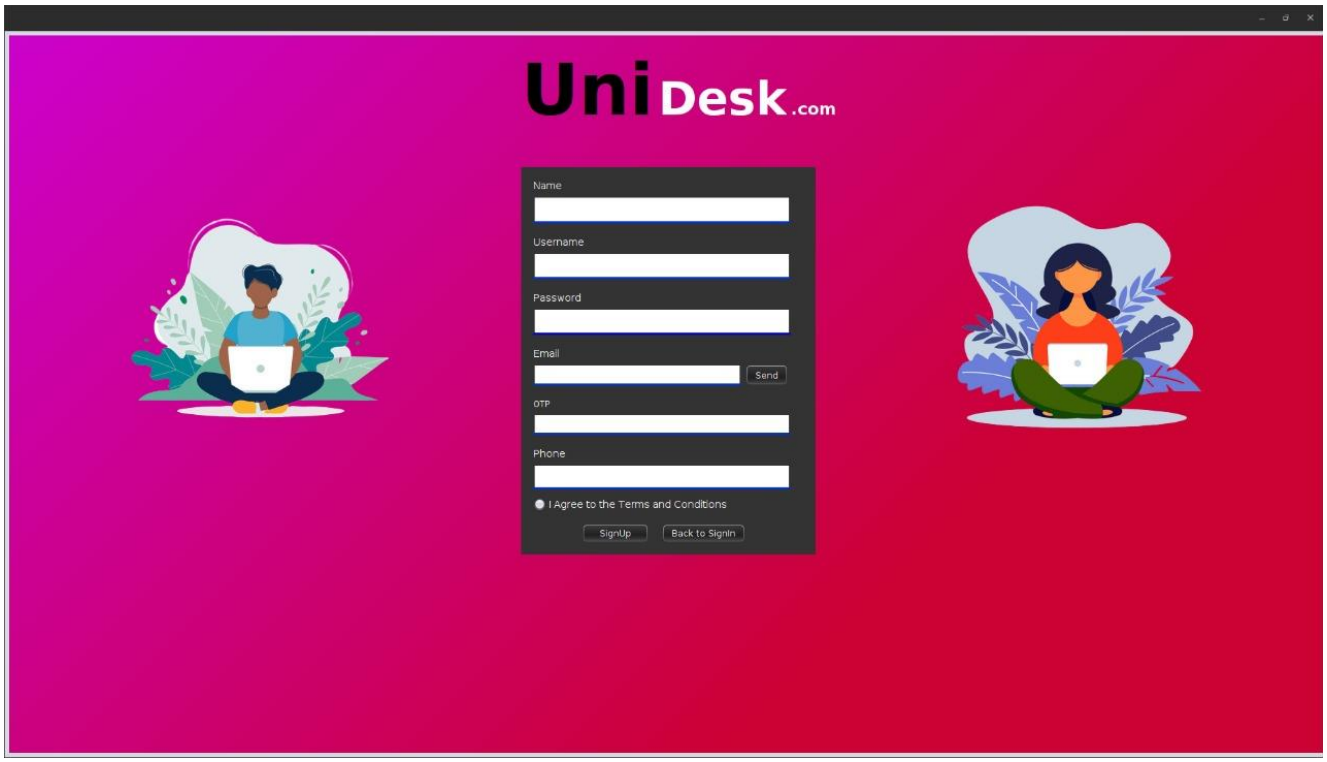

Fig: 4.2

Email verification messages

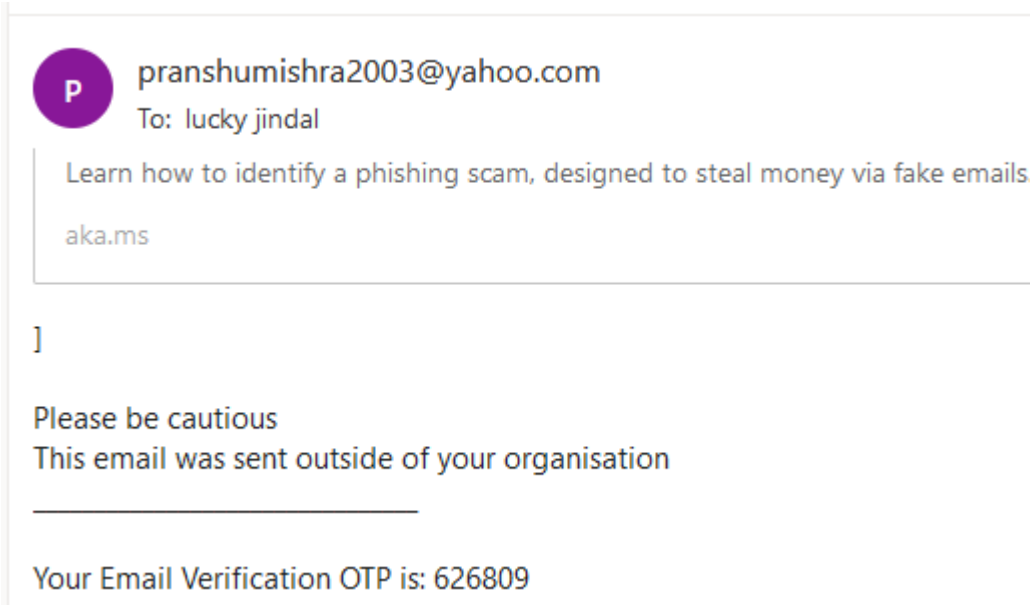

Fig: 4.3

User home page

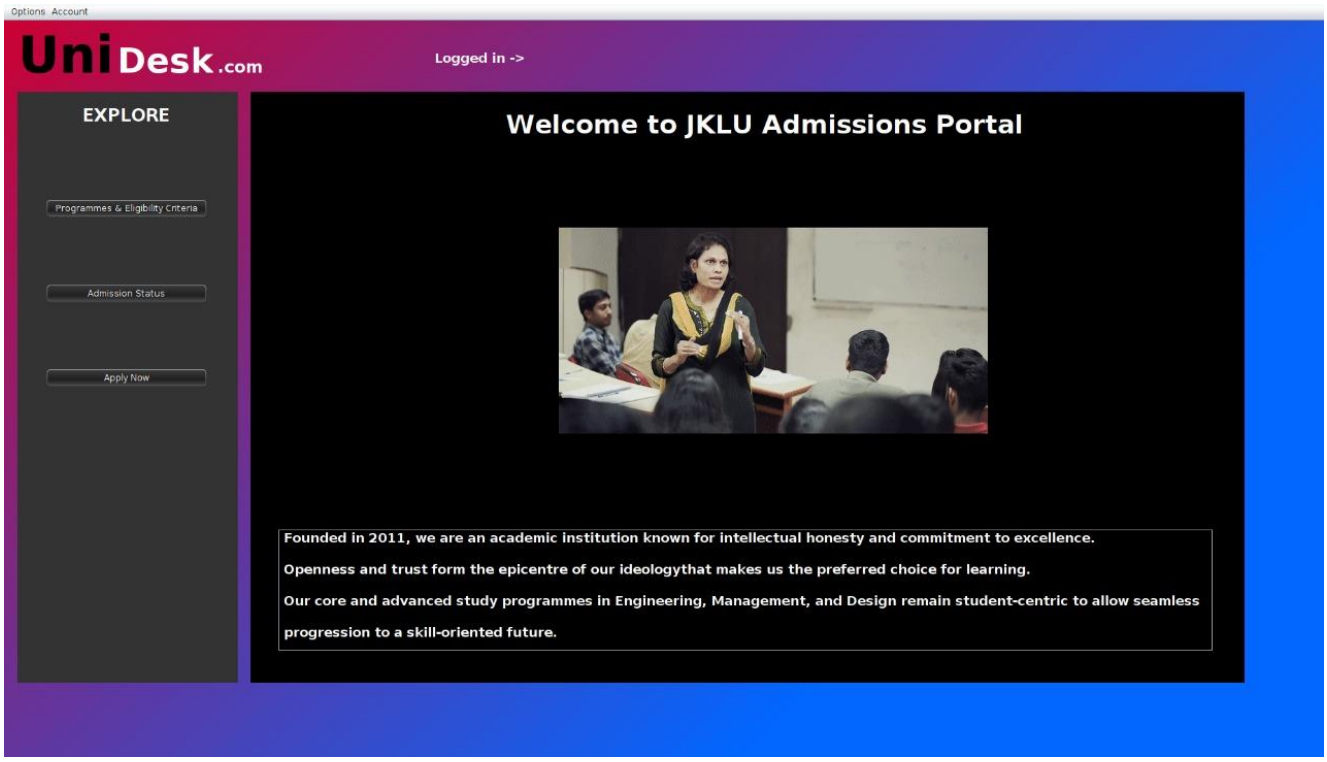

Fig: 4.4

Bill generation of application of form

****

UniPAY Payments Pvt Ltd

****

*

Invoice ID: 752756/UDAP

Time: 23:36:53.399279900

Date: 2022-06-28

Billing Reason: Application Form (JKLU)

****

*

Amount: 999 (Rs only)

****

*

Fig: 4.5

Application confirmation mail

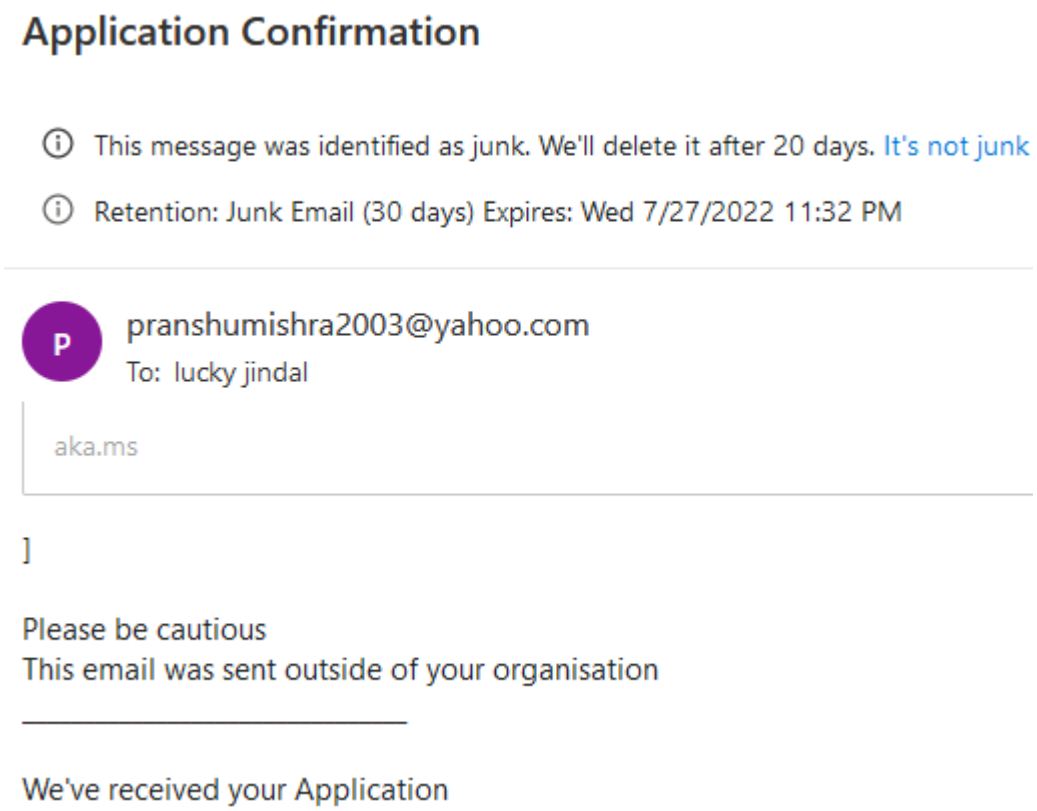

Fig: 4.6

Admin home page

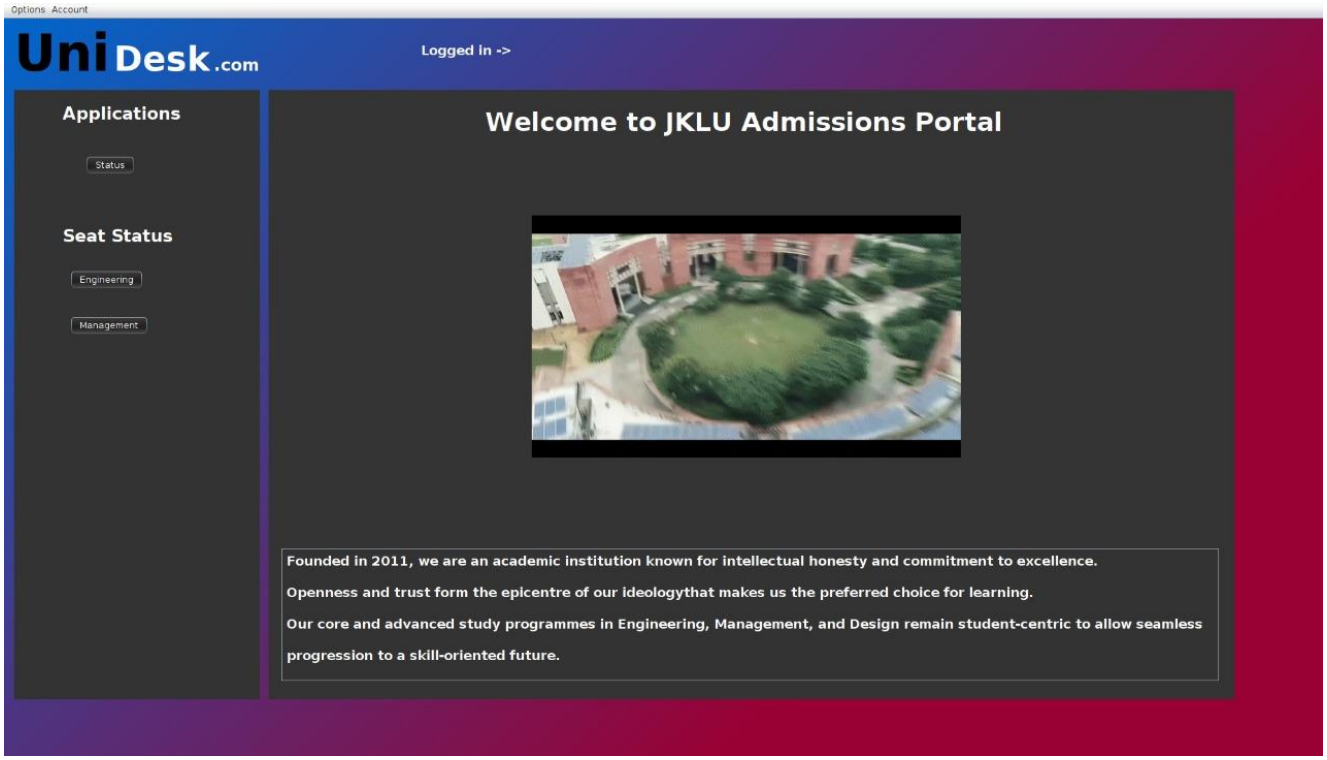

Fig: 4.7

Application accepted/rejected mail

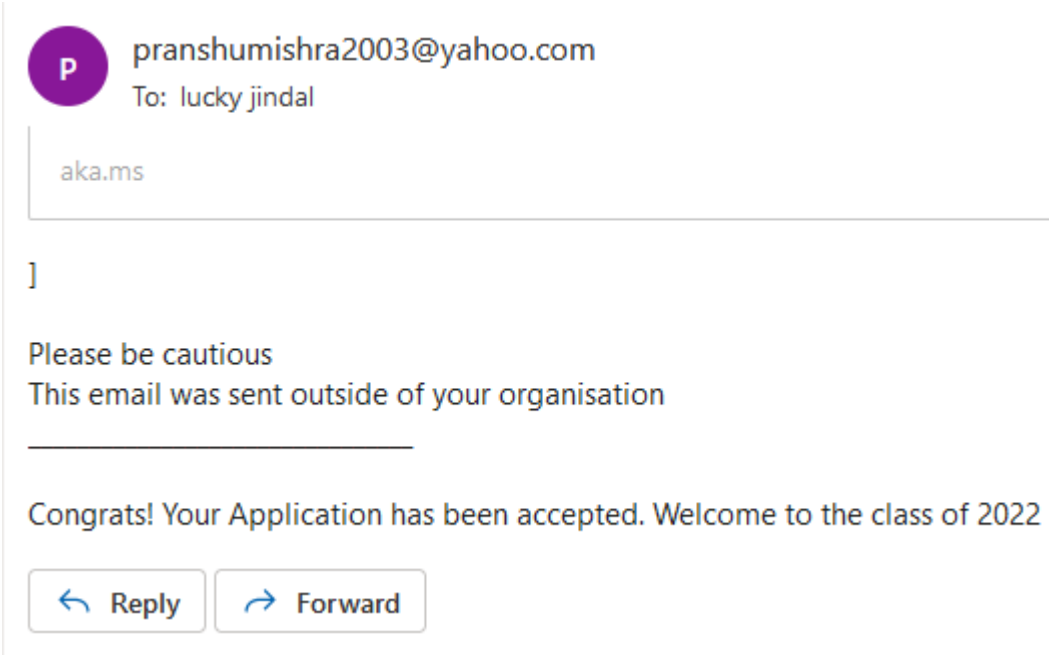

Fig: 4.8

Chapter 5: Scope of Future Application

This project can be in the **university discovery system** after adding some more features and capabilities and solving some problems which might occur in real life scenario.

It can be catered to a University/Organization's personal needs and more features maybe added to it for services that the university may be providing to its user.

Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized banking system. In case of system failure, the organization should be able to process the transaction with another organization or if the worst comes to the worst, it should be ableto complete it manually.

Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized university system. In case of system failure, the organization should be able to process the transaction with another organization or if the worst comes to the worst, it should be able to complete it manually.

With some changes and improved functionality this software can be used in real life as well.

Chapter 6: Conclusion

This project is designed to meet the requirements of University Admission. It has been developed in Java using Apache NetBeans 11.3, keeping in mind the specifications of the system. For designing the system, we have used simple data flow diagrams. Overall, the project teaches us the essential skills like:

- Using Java and Swing Framework to create real life and practical applications.
- Using system analysis and design techniques like data flow diagram in designing the system.
- Understanding the database handling and query processing.

Some of the features and capabilities we were able to achieve in this project are:

- This project has achieved the objective of replacing/augmenting the conventional system of university admission as could be conducted by a typical university admission department.
- Design procedure and output reports are presented in this project report. This is easy to understand that any new modules can be incorporated easily.
- This software is highly user friendly, required an optimal minimal input from user while providing highly relevant and focused outputs.
- Fully automated, avoiding human intervention. Hence it provides a very rapid cost-effective alternative to the conventional manual procedures; the visual are more reliable than the audio forms of manual communication.
- The system can further extend as per user and administrative requirements to encompass other aspects of university system for university admission.

Chapter 7: Bibliography

- Official Apache NetBeans Website: https://netbeans.apache.org/

- Official NetBeans Documentation: https://netbeans.org/kb/index.html
- Official Java Documentation: https://docs.oracle.com/en/java/javase/13/
- Schildt, Herbert. 2019. Java: the complete reference.
- Prepared Statement: https://www.javatpoint.com/PreparedStatement-interface
- Java Mail API: https://www.javatpoint.com/example-of-sending-email-using-java-mail-api
- Hashing in Java: https://www.geeksforgeeks.org/hashing-in-java/
- Java File Handling: https://www.journaldev.com/19115/java-filereader

Stack Overflow: https://stackoverflow.com/

Chapter 8: Appendix

https://github.com/raidin2k3/University-Admission-Portal-a.k.a.-UniDesk.Com

https://drive.google.com/file/d/1L7QBHvzP6Wb0vH6g_k_iiMUW3uhXNK8l/view?usp=sharing