

HITEC University Taxila
Department of Computer Engineering
EC-230 Object Oriented Programming
Lab Project Report



Submitted by:

Abdullah Javed 20-CE-035

Fatima Asim 20-CE-029

Submitted to:

Lab Instructor Kaynat Rana

The Common Application

Introduction:

The Common Application is an undergraduate college admission application that students may use to apply for admissions in various universities across the country. Its purpose is to make the admission application process simple and easy for the applicants.

This application is used for applying for admissions in universities online. As we may have experienced, while applying for admission in our preferred institutions, we have to repeat the same process of registering for an account, providing our bio data, and uploading our documents over and over again on different websites, which is a time taking and frustrating process. The common application simply required one-time registration, and one-time form filling. By matching the eligibility criteria of the universities selected by the applicant and the applicant's data, the app is capable of filtering out the universities in which the applicant is eligible for admission, and automatically applies for admission in those universities.

OOP:

The source code contains the following OOP Concepts:

- Class
- Objects
- Encapsulation
- File Handling
- User Defined Functions
- Data Hiding
- Control Structures

Modules:

Following are the major functions in the software:

- void login()
- void reg()
- void fp()
- int set_file()
- int edit_file()
- int get_file()

- void menu_2()
- void set_data()
- void get_data()
- void edit_data()
- int ec()

Main Menu:

```

Welcome to The Common Application

Main Menu

| Press 1 to Login          |
| Press 2 for Registration  |
| Press 3 if you have forgot your Password |
| Press 4 to exit          |
|                           |
Enter from the options above:
```

This is the main menu of the application. Here the user can login, register for an account, or recover an account's password.

Login:

```

Login Menu

Please enter Username and Password:

USERNAME: abdullah123

PASSWORD: hitecuniversity
```

Here, user simply enters his/her user name and password if he/she already has an account.

Registration:

```
Registration Menu

Enter Username: abdullah123
Enter Password: hitecuniversity
```

In this menu, the user creates a new account for using the application.

Forgot Password:

```
Account Recovery Menu

Press 1 to search your ID by Username
Press 2 to go back to the Main Menu

Select from the above options:
```

The account recovery menu gives the option to recover the password of an account by entering the username.

```
Account Recovery Menu

Press 1 to search your ID by Username
Press 2 to go back to the Main Menu

Select from the above options: 1

Enter the Username: abdullah

Account Found!

Your Password is 12345
```

Account Menu:

Upon logging into the account, the following are the functions provided to the user by the application.

```
Account Options

Press 1 to Enter Your Data
Press 2 to Edit Your Data
Press 3 to View Your Data
Press 4 to Check Your Eligibility
Press 5 to Go Back to Main Menu

Select from the above options:
```

Set Data:

This is a one-time form filling menu, the user will have to enter the details only once.

```
Data Input Menu

Please Fill the Following Fields

| First Name:                | Last Name: Abdullah Javed
| Father's / Guardian's Name: M Javed Raja
| Enter Your Province: Punjab
| Enter Your City: Rawalpindi
| Enter Your Address: Officers Colony
| Enter Your Email: ajr123@gmail.com
| Enter Your Preferred Program: BsCE
| SSC Discipline: Computer Science
| HSSC Discipline: Ics Physics
| SSC Marks: 957
| HSSC Marks: 929
| Contact Number: 0314
| CNIC: 37405
| Enter Your Age: 23
```

Edit Data:

This menu enables the user to edit data in case the user has made a mistake during form filling

```

Data Edit Menu

___ Please Select the Field You Want to Edit ___

Press:
| 1 for First Name
| 2 for Last Name
| 3 for Father's / guardian's Name
| 4 for CNIC
| 5 for Province
| 6 for City
| 7 for Address
| 8 for Email
| 9 for Preferred Program
| 10 for Age
| 11 for SSC Discipline
| 12 for HSSC Discipline
| 13 for SSC Marks
| 14 for HSSC Marks
| 15 for Contact Number
| 16 to Return to Account Menu

```

Check Eligibility:

The user can check whether or not he/she is eligible for admission or not

```

Select from the above options: 4
Choose your province from the following. Enter your choice as 1,2,3 ...
1. Punjab
2. KPK
3. Sindh
4. Balochistan
5. Federal Capital

```

```
You are eligible for Air University and Institute of Space Technology. Good luck!  
Press 1 to go back :
```

Conclusion:

The Common Application is an easy way to apply for admissions in the universities across the country. It saves the user's time and prevents the user from entering the same data over and over again. We have made this application by keeping in mind the needs of the modern-day students. We have applied the concepts of Object Oriented Programming and we have developed this software using C++ Language. We have implemented all the techniques of OOP which we have learned throughout this semester.