TRANSPORT SYSTEM

20/01/2021	Making Transportation FAST & SAFE

20K-0200 Muhammad Usman Malik   BSCS-1A

20K-1034 Muhammad Shahroz Siddiqui

20k-0368 Mohammad Hammad Shakeel

TRANSPORT SYSTEM

MAKING TRANSPORTATION FAST & SAFE

AIM|OUR VISION

Fast is lacking a user end digitized system that will make generating and cataloging information of the university body simple fast and effective. To achieve efficiency, we bring this system with integrated user and admin functionality.

RESEARCH AND PROJECT SELECTION

We asked the transport company about the routes they offered to their respective students and staff members. We asked students and staff about the amount they paid for the transport and adjusted our algorithm to meet those points. Our admin block ensures that no one except admin who have password access can access its commands such as printing passenger data or deleting passenger data.

Project Specification

- **Text Animation using header file**
- **User end data input**
- **File Storing data of student and staff separately**
- **Bill generation**
- **Different Bill amount for student and staff**
- **Extensive and detailed bus selection system**
- **Error control in every step**
- **Admin commands secured by password**
- **Admin able to Delete data by searching by phone number**
- **Admin able to Print data of:**
  - **Student**
  - **Staff**
  - **All parties simultaneously**

Major Modules

1.User:

Major Functions that we had programed in this module were:

- Data function: Input user data and store it using structures
- District function: It acts as a recursive function which runs and monitors how many seats have been utilized in a certain district. As there are 20 seats per bus and 3 bus per route so the function stops a certain district to be called if all 60 seats are filled.
- Route 1-12: We have a function called route n where n is the number of route/bus it is representing it acts as an display function to show to areas of that route.
- North/S/E/W: These functions monitor routes. As routes have max seat 20 then if route is filled user cannot enter that route and may select another route.
- Filling S/T: Separate filing functions for Student and Staff to store their data and route in file. Its parameters are route and struct pointer.
- Billing S/T: It prints the bill onto the screen which includes Name, Address, Bill amount and Route/Bus.

2.Admin:

Major Functions that we had programed in this module were:

- Admin Function: It serves as the security for the admin module. User has to enter correct admin password. After three wrong attempts the user will return back to main menu.
- One/Delete: This function asks user which Admin student or staff he want to delete and inputs a phone number. Searching is done in its respective file and if a match is found the data is delete from the file.
- Print: This asks Admin whether he wants to print either Student / Staff or all data simultaneously.

Bonus Features:

- Animation using a separate header file xdd.h that was coded with a text animation of starting and ending the program.