**APLIKASI PEMBELIAN TIKET KERETA**

**DENGAN BAHASA PEMOGRAMAN *C++***

Oleh:

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**PROGRAM STUDI TEKNIK INFORMATIKA**

**FAKULTAS ILMU KOMPUTER**

**UNIVERSITAS SINGAPERBANGSA KARAWANG**

**KARAWANG**

**2019**

**TowBot Team**

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Kelas : 2G

Penugasan : - Programmer ke-1

- Penyusun Laporan

- Pembuat flowchart

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Kelas : 2G

Penugasan : - Programmer ke-2

- Penyusun Laporan

**Bisnis Proses Aplikasi :**

Aplikasi Pembelian Tiket Kereta ini menggunakan bahasa pemograman basis *C++* dan menggunakan system main utama yang menampilkan menu aplikasi yaitu : List Jurusan/Jadwal/Kelas, Menu Transaksi dan Program Exit. Selain itu aplikasi ini juga menerapkan system sub program dengan menggunakan fungsi untuk menjalankan input data dan transaksi pembelian tiket. Selain itu aplikasi ini juga mempunyai fitur back, ketika anda salah menginput data. Tampilan dari aplikasi ini user friendly, dan terlihat menarik.

**Fasilitas Utama :**

1. Menampilkan form Login (admin)
2. Menampilkan Menu Utama
3. Menampilkan List Jurusan/Jadwal/Kelas
4. Menampilkan Menu Transaksi
5. Fitur Transaksi Lagi
6. Rekap Data

**Fasilitas Tambahan :**

1. Fitur Back & Exit
2. Fitur Loading

**Pseudocode :**

**Judul :** Program Tiket Kereta Api

**Deklarasi :** user, pass : *string*

jur,wkt,umr,kls,jum,harga,pil,loading() : *integer*

stj,nama,ktp : *character*

gotoxy(),towbot(),pertama(),kedua(),menu\_utama(),header(),keluar1(),keluar2(),kembali(),salah(),login() : *void*

**Deskripsi :** *Input* user & pass

*If* user = admin && pass = admin

*Then* menu\_utama()

*Else* Username atau Password salah, silakan login kembali.

*Output* menu : 1. List Jurusan/Jadwal/Kelas

2. Pembelian Tiket

3. Exit

*Input* pilihan menu (1, 2, 3)

*Switch* (pil)

*Case* 1 : pertama()

*Case* 2 : kedua()

*Case* 3 : keluar2()

*Default*: Salah()

*Void* pertama()

*Read* pertama()

*Void* kedua()

*Input* Jumlah Penumpang

*Input* Nama & No KTP

*Input* Jurusan

*Input* Waktu

*Input* Kelas

*Input* Setuju/Tidak

*Write* (Nama,Jurusan,Waktu,Kelas)

*Void* keluar2()

*Read* keluar2()

*Exit(0)*

**Source Code** :

#include <iostream>

#include <conio.h>

#include <windows.h>

#include <string.h>

using namespace std;

void gotoxy(),towbot(),pertama(),kedua(),menu\_utama(),header(),keluar1(),keluar2(),kembali(),salah(),login();

int loading(),pil;

main()

{

system("color 90");

login();

loading();

while(4)

{

menu\_utama();

switch(pil)

{

case 1:

pertama();

break;

case 2:

kedua();

break;

case 3:

keluar2();

exit (0);

break;

default:

salah();

break;

}

}

}

void gotoxy(int x, int y) //fungsi untuk membuat titik kordinat

{

HANDLE hConsoleOutput;

COORD dwCursorPosition;

dwCursorPosition.X=x;

dwCursorPosition.Y=y;

hConsoleOutput=GetStdHandle(STD\_OUTPUT\_HANDLE);

SetConsoleCursorPosition(hConsoleOutput,dwCursorPosition);

}

void login() //subprogram untuk login

{

header();

string user, pass ;

gotoxy(30,6); cout<<"=================================";

gotoxy(30,7); cout<<"| Silakan Login |";

gotoxy(30,8); cout<<"=================================";

gotoxy(30,9); cout<<"Username : ";cin>>user;

gotoxy(30,10);cout<<"Password : ";cin>>pass;

if(user=="admin" && pass=="admin")

{gotoxy(38,12);cout<<"Login Berhasil !!!";Sleep(1500);

system("cls"); }

else

{gotoxy(38,12);cout<<"Login Gagal, Username atau Password Salah !!!";

getch();

system("cls");

login(); }

}

void towbot() //SUBPROGRAM nama kelompok

{

gotoxy(25,5);cout<<"===================================================================\n";Sleep(500);

gotoxy(25,6); cout<<"| ======== = = = = = = = = ======== |\n";Sleep(500);

gotoxy(25,7); cout<<"| || = = = = = = = = || |\n";Sleep(500);

gotoxy(25,8); cout<<"| || = = = = = = = = = = = || |\n";Sleep(500);

gotoxy(25,9); cout<<"| || = = = = = = = = = = || |\n";Sleep(500);

gotoxy(25,10);cout<<"| || = = = = = = = = = = || |\n";Sleep(500);

gotoxy(25,11);cout<<"===================================================================\n";Sleep(500);

gotoxy(25,12);cout<<"Anggota Kelompok:\n";

gotoxy(25,13);cout<<"\t Hilmy Farid 1810631170047\n";Sleep(500); //Sleep untuk delay time

gotoxy(25,14);cout<<"\t Lalang Gunawan 1810631170060\n";Sleep(500);

gotoxy(25,16);cout<<"Press any key to continue...";

getch();

}

int loading() //SUBPROGRAM loading

{

int n,j;

for(n=0;n<100;n++)

{

gotoxy(53,4);cout<<"LOADING "<< n+1<<" %";

gotoxy(10,5);cout<<"";

for(j=0;j<n;j++)

{

cout<<">";

}

Sleep(20);

system("cls");

}

towbot();

}

void header() //SUBPROGRAM Header

{ gotoxy(20,2);cout<<"=========================================================";

gotoxy(20,3);cout<<"||| SELAMAT DATANG PROGRAM PEMESANAN TIKET KERETA API |||";

gotoxy(20,4);cout<<"||| PEMESANAN KHUSUS PEMBERANGKATAN DARI JAKARTA |||";

gotoxy(20,5);cout<<"=========================================================";

}

void menu\_utama() //SUBPROGRAM untuk main menu

{

system("cls");

header();

gotoxy(30,6); cout<<"=================================";

gotoxy(30,7); cout<<"| M A I N M E N U |";

gotoxy(30,8); cout<<"=================================";

gotoxy(30,9); cout<<"| |";

gotoxy(30,10);cout<<"| 1. List Jurusan/Jadwal/Kelas |";

gotoxy(30,11);cout<<"| |";

gotoxy(30,12);cout<<"|-------------------------------|";

gotoxy(30,13);cout<<"| |";

gotoxy(30,14);cout<<"| 2. Pembelian Tiket |";

gotoxy(30,15);cout<<"| |";

gotoxy(30,16);cout<<"|-------------------------------|";

gotoxy(30,17);cout<<"| |";

gotoxy(30,18);cout<<"| 3. Exit |";

gotoxy(30,19);cout<<"| |";

gotoxy(30,20);cout<<"=================================";

gotoxy(30,21);cout<<"Pilihan Anda : ";cin>>pil;

fflush(stdin);

}

void salah() //Subrogram untuk menapilkan salah pada main menu

{

gotoxy(30,23);cout<<"Kode Yang Anda Input Salah !!!";

gotoxy(30,24);cout<<"Silahkan Masukan Nilai Antara 1/2/3.";

getch();

}

void pertama() //Subrogram untuk menampilkan list Jurusan/Jadwal/Kelas

{

system("cls");

header();

gotoxy(3,6); cout<<"========================================================\n";

gotoxy(3,7); cout<<"| NO.| Kode/KA | Jurusan | Jadwal Pemberangkatan |\n";

gotoxy(3,8); cout<<"========================================================\n";

gotoxy(3,9); cout<<"| | | | Pagi Jam 07:30 |\n";

gotoxy(3,10);cout<<"| 1. | JKT-BDG | Bandung | Siang Jam 14:15 |\n";

gotoxy(3,11);cout<<"| | [Agro Wilis] | | Sore Jam 15:15 |\n";

gotoxy(3,12);cout<<"|------------------------------------------------------|\n";

gotoxy(3,13);cout<<"| | | | Pagi Jam 08:00 |\n";

gotoxy(3,14);cout<<"| 2. | JKT-KRG | Karawang | Siang Jam 14:30 |\n";

gotoxy(3,15);cout<<"| | [Agro Bromo] | | Sore Jam 15:30 |\n";

gotoxy(3,16);cout<<"|------------------------------------------------------|\n";

gotoxy(3,17);cout<<"| | | | Pagi Jam 08:30 |\n";

gotoxy(3,18);cout<<"| 3. | JKT-SMR | Semarang | Siang Jam 14:45 |\n";

gotoxy(3,19);cout<<"| | [Agro Bima] | | Sore Jam 15:45 |\n";

gotoxy(3,20);cout<<"|------------------------------------------------------|\n";

gotoxy(3,21);cout<<"| | | | Pagi Jam 09:00 |\n";

gotoxy(3,22);cout<<"| 4. | JKT-SLO | Solo | Siang Jam 15:00 |\n";

gotoxy(3,23);cout<<"| | [Agro Mas] | | Sore Jam 16:00 |\n";

gotoxy(3,24);cout<<"========================================================\n";

gotoxy(60,6); cout<<"==============================================\n";

gotoxy(60,7); cout<<"| NO.| Kelas | Harga |\n";

gotoxy(60,8); cout<<"|---------------------------------------------|\n";

gotoxy(60,9); cout<<"| | | |\n";

gotoxy(60,10);cout<<"| 1. | Eksekutif | Rp35.000 |\n";

gotoxy(60,11);cout<<"| | | |\n";

gotoxy(60,12);cout<<"| | | |\n";

gotoxy(60,13);cout<<"| 2. | Bisnis | Rp25.000 |\n";

gotoxy(60,14);cout<<"| | | |\n";

gotoxy(60,15);cout<<"| | | |\n";

gotoxy(60,16);cout<<"| 1. | Ekonomi | Rp10.000 |\n";

gotoxy(60,17);cout<<"| | | |\n";

gotoxy(60,18);cout<<"==============================================\n";

gotoxy(0,25);cout<<"\nPress any key to back to the menu...";

cin.get();

}

void kedua() //Subrogram untuk menampilkan Pembelian Tiket

{

long int jur,wkt,umr,kls,jum,harga;

char stj,nama[50][50],ktp[25][25];

menu:

system("cls");

header();

gotoxy(20,6);cout<<"Masukan Jumlah Penumpang : ";cin>>jum;

for (int i=1;i<=jum;i++)

{

cout<<"\n\t\t Penumpang Ke-"<<i<<endl;

cout<<"\t\t Nama \t : ";cin>>nama[i];

fflush(stdin);

cout<<"\t\t No. KTP/NIK\t : ";cin>>ktp[i];

fflush(stdin);

}

jur:

system("cls");

header();

gotoxy(30,6); cout<<"=================================";

gotoxy(30,7); cout<<"| NO.| Jurusan |";

gotoxy(30,8); cout<<"=================================";

gotoxy(30,9); cout<<"| 1. | Bandung |";

gotoxy(30,10);cout<<"|-------------------------------|";

gotoxy(30,11);cout<<"| 2. | Karawang |";

gotoxy(30,12);cout<<"|-------------------------------|";

gotoxy(30,13);cout<<"| 3. | Semarang |";

gotoxy(30,14);cout<<"|-------------------------------|";

gotoxy(30,15);cout<<"| 4. | Solo |";

gotoxy(30,16);cout<<"|-------------------------------|";

gotoxy(30,17);cout<<"| 5. | Kembali |";

gotoxy(30,18);cout<<"=================================";

gotoxy(30,19);cout<<"Pilih [1-5]: ";cin>>jur;

fflush(stdin);

if (jur<=4)

{

goto wkt;

}

else if (jur==5)

{

goto menu;

}

else

{

gotoxy(30,21);cout<<"INPUT YANG ANDA MASUKAN SALAH !!!";

getch();

system("cls");

goto jur;

}

wkt:

system("cls");

header();

gotoxy(30,6); cout<<"================================="<<endl;

gotoxy(30,7); cout<<"| NO.| Waktu |"<<endl;

gotoxy(30,8); cout<<"================================="<<endl;

gotoxy(30,9); cout<<"| 1. | Pagi |"<<endl;

gotoxy(30,10);cout<<"|-------------------------------|"<<endl;

gotoxy(30,11);cout<<"| 2. | Siang |"<<endl;

gotoxy(30,12);cout<<"|-------------------------------|"<<endl;

gotoxy(30,13);cout<<"| 3. | Sore |"<<endl;

gotoxy(30,14);cout<<"|-------------------------------|"<<endl;

gotoxy(30,15);cout<<"| 4. | Kembali |"<<endl;

gotoxy(30,16);cout<<"================================="<<endl;

gotoxy(30,17);cout<<"Pilih [1-4]: ";cin>>wkt;

fflush(stdin);

if (wkt<=3)

{

goto kls;

}

else if (wkt==4)

{

goto jur;

}

else

{

gotoxy(30,19);cout<<"INPUT YANG ANDA MASUKAN SALAH !!!";

getch();

system("cls");

goto wkt;

}

kls:

system("cls");

header();

gotoxy(30,6); cout<<"================================="<<endl;

gotoxy(30,7); cout<<"| NO.| Kelas |"<<endl;

gotoxy(30,8); cout<<"================================="<<endl;

gotoxy(30,9); cout<<"| 1. | Eksekutif |"<<endl;

gotoxy(30,10);cout<<"|-------------------------------|"<<endl;

gotoxy(30,11);cout<<"| 2. | Bisnis |"<<endl;

gotoxy(30,12);cout<<"|-------------------------------|"<<endl;

gotoxy(30,13);cout<<"| 3. | Ekonomi |"<<endl;

gotoxy(30,14);cout<<"|-------------------------------|"<<endl;

gotoxy(30,15);cout<<"| 4. | Kembali |"<<endl;

gotoxy(30,16);cout<<"================================="<<endl;

gotoxy(30,17);cout<<"Pilih [1-4]: ";cin>>kls;

fflush(stdin);

if (kls<=3)

{

goto psnn;

}

else if (kls==4)

{

goto wkt;

}

else

{

gotoxy(30,19);cout<<"INPUT YANG ANDA MASUKAN SALAH !!!";

getch();

system("cls");

goto kls;

}

psnn:

system("cls");

header();

gotoxy(20,7);cout<<"Jumlah Tiket Yang di Pesan : "<<jum<<" Tiket";

{

if (kls==1)

{

gotoxy(20,8);cout<<"Kelas Yang Dipilih : Eksekutif";

gotoxy(20,9);cout<<"Harga Satuan Tiket : Rp350000";

}

else if (kls==2)

{

gotoxy(20,8);cout<<"Kelas Yang Dipilih : Bisnis";

gotoxy(20,9);cout<<"Harga Satuan Tiket : Rp250000";

}

else if (kls==3)

{

gotoxy(20,8);cout<<"Kelas Yang Dipilih : Ekonomi";

gotoxy(20,9);cout<<"Harga Satuan Tiket : Rp100000";

}

}

gotoxy(20,11);cout<<"=========================================================";

{

if (kls==1)

{

harga=jum\*350000;

gotoxy(20,12);cout<<"Total Harga = Rp"<<harga;

}

else if (kls==2)

{

harga=jum\*250000;

gotoxy(20,12);cout<<"Total Harga = Rp"<<harga;

}

else

{

harga=jum\*100000;

gotoxy(20,12);cout<<"Total Harga = Rp"<<harga;

}

}

gotoxy(20,14);cout<<"Apakah Anda Setuju [y/t]: ";cin>>stj;

system("cls");

if (stj=='y'||stj=='Y')

{goto rekap;}

else

{goto menu;}

rekap:

header();

gotoxy(20,7);cout<<"=========================================================";

gotoxy(24,8);cout<<" TIKET KERETA YANG ANDA PESAN";

gotoxy(20,9);cout<<"---------------------------------------------------------";

for (int a=1;a<=jum;a++)

{

cout<<"\n\t\t Nama\t : "<<nama[a];cout<<"\tNo KTP\t : "<<ktp[a];

}

switch(jur)

{

case 1:

cout<<"\n\t\t Kode\t : JKT-BDG";

cout<<"\n\t\t Nama KA\t : Agro Wilis";

break;

case 2:

cout<<"\n\t\t Kode\t : JKT-KRG";

cout<<"\n\t\t Nama KA\t : Agro Bromo";

break;

case 3:

cout<<"\n\t\t Kode\t : JKT-SMR";

cout<<"\n\t\t Nama KA\t : Agro Bima";

break;

case 4:

cout<<"\n\t\t Kode\t : JKT-SL";

cout<<"\n\t\t Nama KA\t : Agro Mas";

break;

}

switch(kls)

{

case 1:

cout<<"\n\t\t Kelas\t : Eksekutif";

break;

case 2:

cout<<"\n\t\t Kelas\t : Bisnis ";

break;

case 3:

cout<<"\n\t\t Kelas\t : Ekonomi";

}

switch(jur)

{

case 1:

if(wkt==1)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Pagi Pukul Jam 07:30";}

else if(wkt==2)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Siang Pukul Jam 14:15";}

else if(wkt==3)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Sore Pukul Jam 15:15";}

break;

case 2:

if(wkt==1)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Pagi Pukul Jam 08:00";}

else if(wkt==2)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Siang Pukul Jam 14:30";}

else if(wkt==3)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Sore Pukul Jam 15:30";}

break;

case 3:

if(wkt==1)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Pagi Pukul Jam 08:30";}

else if(wkt==2)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Siang Pukul Jam 14:45";}

else if(wkt==3)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Sore Pukul Jam 15:45";}

break;

case 4:

if(wkt==1)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Pagi Jam Pukul 09:00";}

else if(wkt==2)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Siang Jam Pukul 16:00";}

else if(wkt==3)

{cout<<"\n\n\t\t Jadwal Pemberangkatan Sore Jam Pukul 16:30";}

break;

}

cout<<"\n\t\t Jumlah Tiket Yang Dipesan "<<jum;

cout<<"\n\t\t ---------------------------------------------------------";

cout<<"\n\t\t Total : Rp"<<harga<<",00"<<endl;

cout<<"\t\t ========================================================="<<endl;

keluar1();

kembali();

}

void kembali() //Subrogram untuk untuk beli tiket lagi atau keluar dari program

{

int stj;

cout<<endl<<endl;

cout<<"\t\t\t ================================="<<endl;

cout<<"\t\t\t | 1. | Pesan Tiket Lagi |"<<endl;

cout<<"\t\t\t |-------------------------------|"<<endl;

cout<<"\t\t\t | 2. | Kembali ke Menu |"<<endl;

cout<<"\t\t\t |-------------------------------|"<<endl;

cout<<"\t\t\t | 3. | Keluar |"<<endl;

cout<<"\t\t\t ================================="<<endl;

cout<<"\t\t\t Pilih [1-3] : ";cin>>stj;

if (stj==1)

{

kedua();

}

else if(stj==2)

{

menu\_utama();

}

else if(stj==3)

{

keluar2();

ExitProcess(0);

}

else

{

cout<<"\t\t INPUT YANG ANDA MASUKAN SALAH !!!"<<endl;

getch();

kembali();

}

}

void keluar1() //Subrogram untuk keluar setelah pembelian

{

char x[]={"\t\t .:Terima Kasih Semoga Perjalanan Anda Menyenangkan:."};

int a,b,i,n;

n=strlen(x);

for(i=0;i<n;i++)

{ for(a=0;a<=99999;a++){

for(b=0;b<=120;b++){

}

}

cout<<x[i];

}

Sleep(1500);

}

void keluar2() //Subrogram Untuk Keluar dari Program

{

system("cls");

header();

char x[]={".:Terima Kasih Telah Menggunakan Program Kami:."}; //Ucapan Selamat

int a,b,i,n;

n=strlen(x);

for(i=0;i<n;i++)

{for(a=0;a<=99999;a++)

{

for(b=0;b<=120;b++){}

}

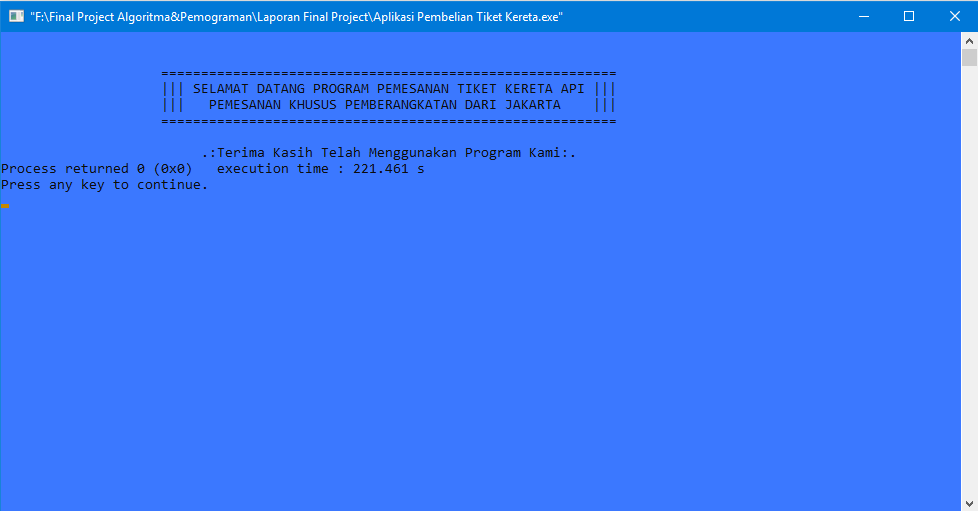
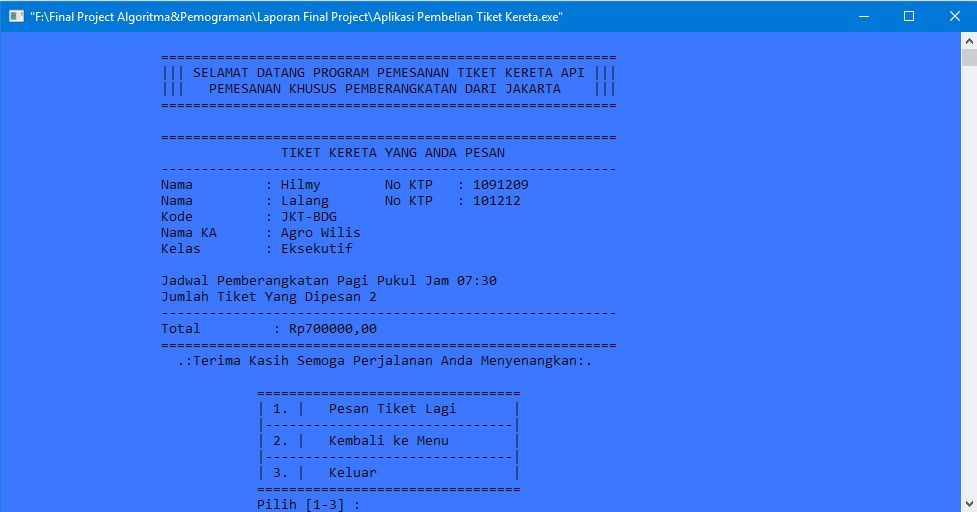
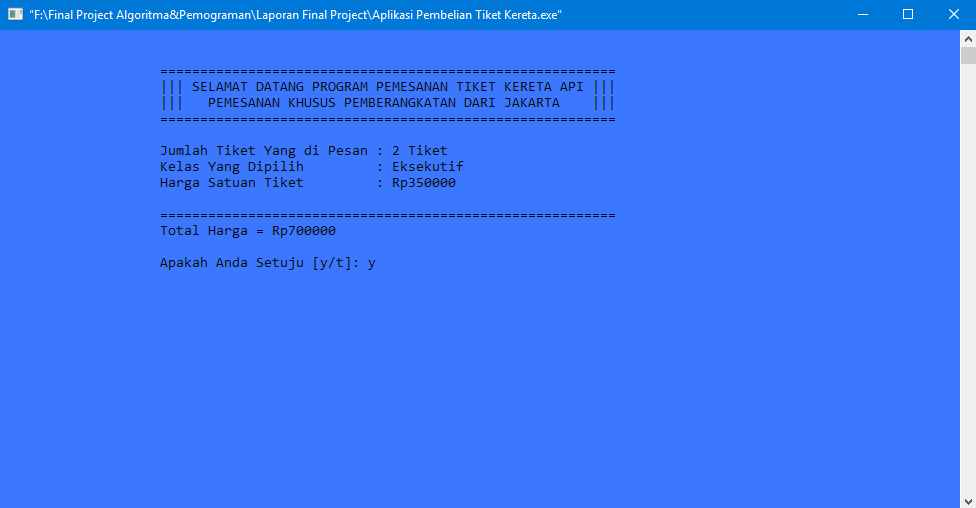
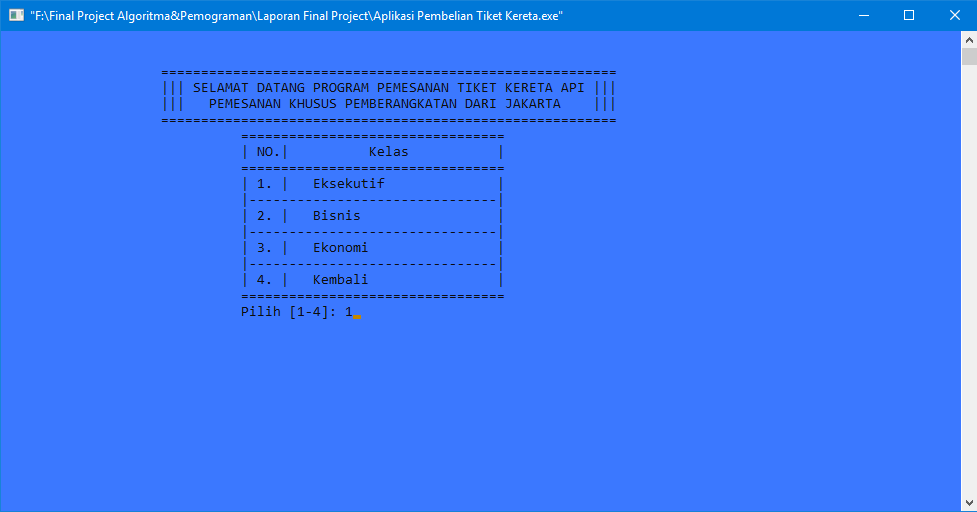
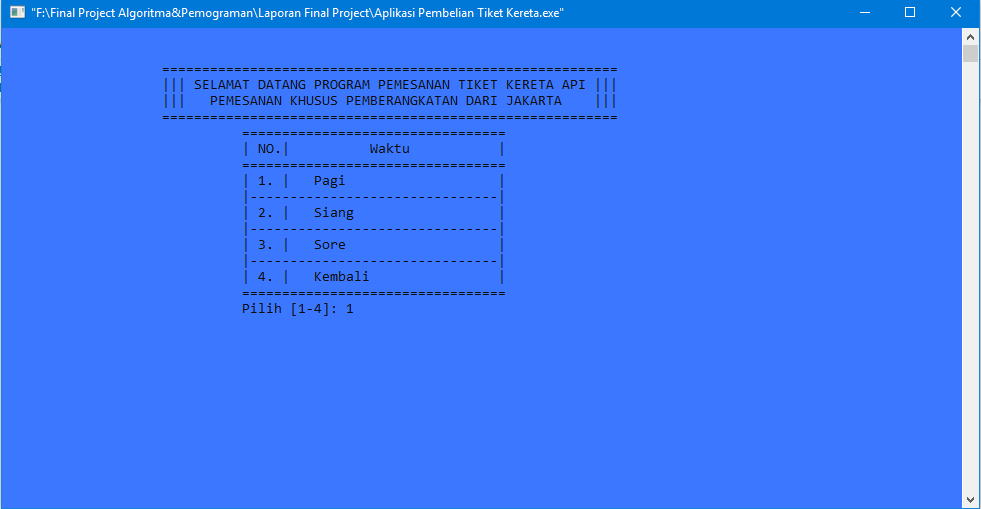
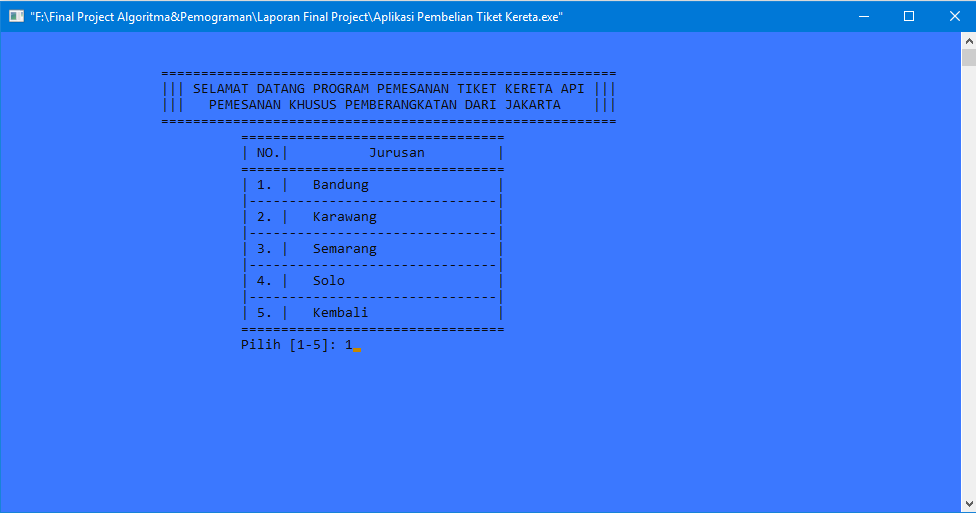
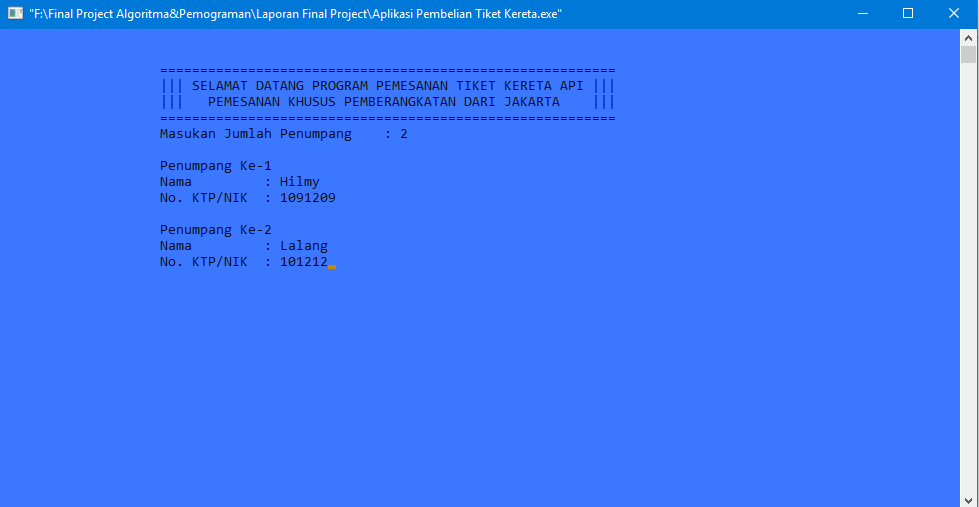
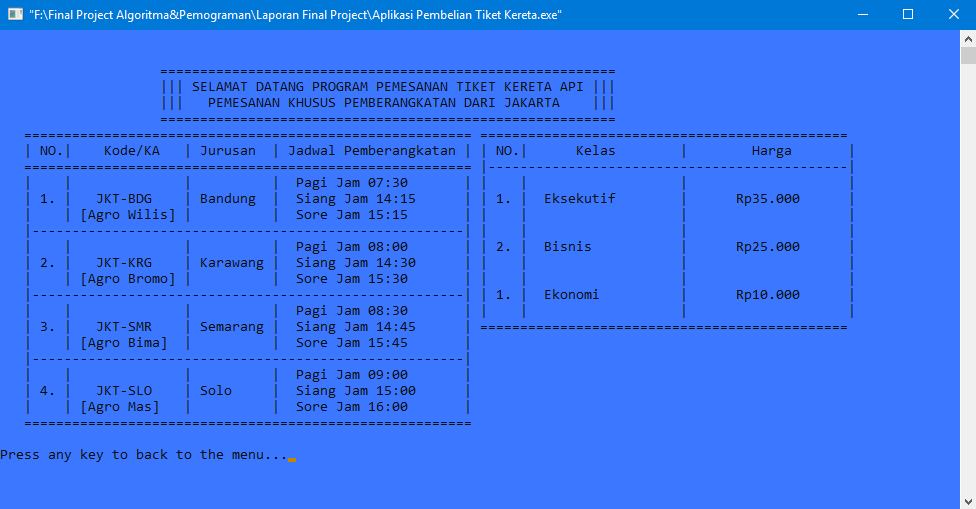
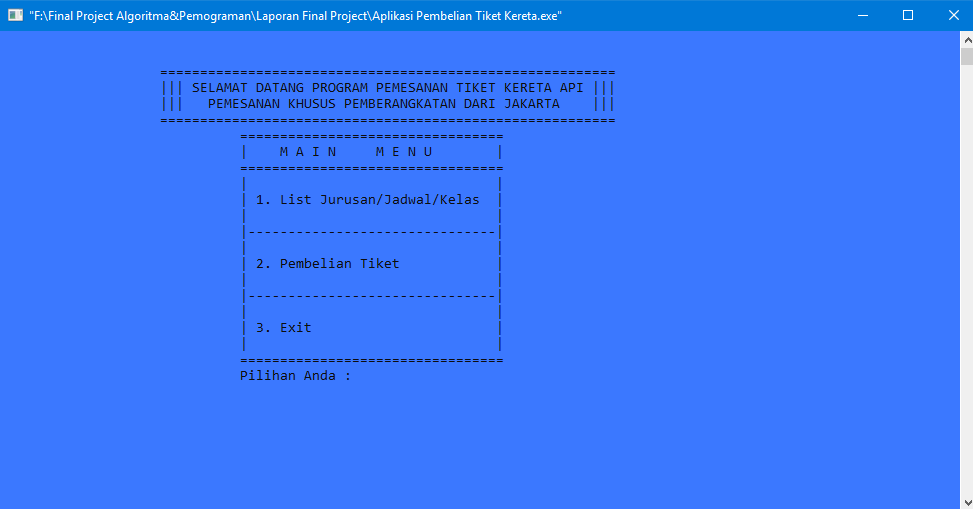
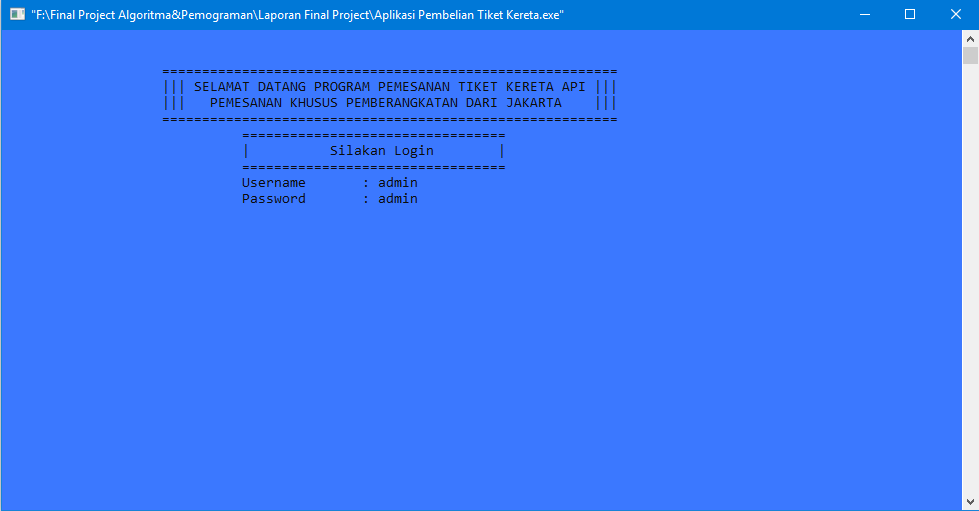
gotoxy(25+i,7);cout<<x[i];

}

Sleep(1000);

}

**Screenshot Running Program**

****