

**Benha University. Faculty of Computer**

**Informatics.**

**Flight Reservation system**

A summer training project submitted in partial fulfillment of the requirements for the degree of Bachelor of Computers and Informatics.

**1st Year Students Summer Training .**

*Project Team*

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We hereby certify that this project, submitted by the project teamwork, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the seminar requirements for the degree of Bachelor of Computers and Informatics.

**Discussion Committee:**

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**Abstract**

Due to a technical malfunction in our airline system, the team has set up a new system for the company to help employees to do their job easily. Where we have created a system that helps the employee know all the data from the traveler and help him to choose the kind of trip , store and book trips for travelers and the date of travel and return .It helps him to know the number of passengers and the type of trip he wants and set the price of the ticket for each trip. And then enter the traveler's data and add the attachment to the reservation file. The number of tickets is taken out by the number of bookings, then when the information finish the user will end the program.

**Introduction**

When the user was storing the client's data, he noticed that there was an imbalance in data entry. When a program engineer was called, he discovered a problem with internalization and data storage. Note that the data entry process needs a new system to make it easier for employees to do their job and not to face the company for loss.  
In such crises, the engineer responsible for finding a solution to the problem only when there is a radical problem calls the system to change completely because it is no longer effective for the company's needs and cause harm to the company.  
.

**Program Interface**

At the beginning when the user opens the program the user found beginning form and select start to open the program through the second form user selects traveling and choose the country to travel to and determine the date of travel. After that, the user enters the numbers of people who want to enter the plane and enter the flight class and do search. The user then shows all flights to the desired country on list box, all the dates of the day and the ticket price per person. Then will show massage if you want to book travel or no. If the client wants to move from one flight to another, the user must press the exit button  
 If the client agrees to the price and he wants to complete the data on the user choose the re-entered by the client and clicking on it to appear a new window enter all the data of the customer and make sure the reservation. After that step, the user will ask the customer to his visa card number and prepares the ticket for the customer **.**

**Program Execution**

When we run the program a start groupbox 1 appear this groupbox contain an opening sentence , and start button to hide groupbox and move you to the first form

* groupbox1 -> Hide ();

when first form appears there are 2 Radiobutton ,5 lable to guid you to understand the form , 2 combobox to choose the country that you want to leave from and to ,2 date time picker o select the date you want to leave , combobox to select the class of flight you want , 2 button the frist one to search on the file and appear data on the listbox on that form

* listbox1->show();

to search on file about times of trip

streamreader

**Input and Output**

**Frist Form :-**

**Start Buttom :-**

private: System::Void button3\_Click(System::Object^ sender, System::EventArgs^ e) {

groupBox1->Hide();

}

**Radio Buttom1 :-**

private: System::Void radioButton1\_CheckedChanged(System::Object^ sender, System::EventArgs^ e) {

dateTimePicker2->Show();

label4->Show();

}

**Radio Buttom2 :-**

private: System::Void radioButton2\_CheckedChanged(System::Object^ sender, System::EventArgs^ e) {

dateTimePicker2->Hide();

label4->Hide();

}

**Buttom1 :-**

private: System::Void button1\_Click(System::Object^ sender, System::EventArgs^ e) {

listBox1->Show();

listBox1->Dock;

StreamReader ^sr = gcnew StreamReader("fldata.txt");

while (!sr->EndOfStream)

{

String^ row = Convert::ToString(sr->ReadLine());

array<Char>^ splitter = { '\t' };

array<String^>^ arr = row->Split(splitter);

String^ x = Convert::ToString(dateTimePicker1->Value);

if (x == arr[0])

{

listBox1->Items->Add(arr[1]);

listBox1->Items->Add(arr[2]);

listBox1->Items->Add(arr[3]);

listBox1->Items->Add(arr[4]);

listBox1->Items->Add(arr[5]);

listBox1->Items->Add(arr[6]);

listBox1->Items->Add(arr[7]);

listBox1->Items->Add(arr[8]);

listBox1->Items->Add(arr[9]);

if (comboBox3->Text == "Economy")

{

listBox1->Items->Add(arr[10]);

}

if (comboBox3->Text == "Business")

{

listBox1->Items->Add(arr[11]);

}

if (comboBox3->Text == "First")

{

listBox1->Items->Add(arr[12]);

}

}

}

sr->Close();

CreateControl();

};

**Buttom2 :-**

private: System::Void button2\_Click\_1(System::Object^ sender, System::EventArgs^ e) {

Application::Exit();

}

**Buttom3 :-**

private: System::Void button3\_Click(System::Object^ sender, System::EventArgs^ e) {

groupBox1->Hide();

}

**Combo Box1 :-**

private: System::Void comboBox1\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (comboBox2->SelectedItem&&comboBox3->SelectedItem)

button1->Enabled = true;

else

{

button1->Enabled = false;

}

}

**Combo Box2 :-**

private: System::Void comboBox2\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (comboBox3->SelectedItem&&comboBox2->SelectedItem)

button1->Enabled = true;

else

{

button1->Enabled = false;

}

}

**Combo Box 3:-**

private: System::Void comboBox3\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (comboBox1->SelectedItem&&comboBox2->SelectedItem)

button1->Enabled = true;

else

{

button1->Enabled = false;

}

}

**List Box1 :-**

private: System::Void listBox1\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (MessageBox::Show("Do you want to book now?", "Ticket booking", MessageBoxButtons::YesNo, MessageBoxIcon::Question)==System::Windows::Forms::DialogResult::Yes)

{

StreamWriter^ sw = gcnew StreamWriter("flsave.txt");

sw->WriteLine(label1->Text +" :" +comboBox1->SelectedItem +"\t" + label2->Text + " :" + comboBox2->Selecte

dItem);

if (radioButton1->Checked)

{

sw->WriteLine(label3->Text + " :" + dateTimePicker1->Value + "\t" + label4->Text + " :" + dateTimePicker2->Value);

}

else if(radioButton2->Checked)

{

sw->WriteLine(label3->Text + " :" + dateTimePicker1->Value);

}

sw->WriteLine(label7->Text + " :" + comboBox3->SelectedItem);

sw->Close();

MyForm1^ y = gcnew MyForm1();

y->Show();

MyForm::Hide();

}

else

{

MyForm^ y = gcnew MyForm();

y->Show();

MyForm::Hide();

}

}

**Second Form :-**

**Combo Box1 :-**

private: System::Void comboBox1\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&textBox1->SelectedText&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Combo Box2 :-**

private: System::Void comboBox2\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&textBox1->SelectedText&&comboBox1->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Combo Box3 :-**

private: System::Void comboBox3\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&textBox1->SelectedText&&comboBox2->SelectedItem&&comboBox1->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Combo Box4 :-**

private: System::Void comboBox4\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&textBox1->SelectedText&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox1->SelectedItem)

button1->Enabled = true;

}

**Text Box1 :-**

private: System::Void textBox1\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;}

**Text Box2 :-**

private: System::Void textBox2\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox1->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Text Box3 :-**

private: System::Void textBox3\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox1->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Text Box4 :-**

private: System::Void textBox4\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox1->SelectedText&&textBox5->SelectedText&&textBox6->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Text Box5 :-**

private: System::Void textBox5\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox1->SelectedText&&textBox6->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Text Box6 :-**

private: System::Void textBox6\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox4->SelectedText&&textBox5->SelectedText&&textBox1->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem&&comboBox3->SelectedItem&&comboBox4->SelectedItem)

button1->Enabled = true;

}

**Buttom1 :-**

private: System::Void button1\_Click\_1(System::Object^ sender, System::EventArgs^ e) {

if (MessageBox::Show("Are you sure from information?", "Certainly", MessageBoxButtons::YesNo, MessageBoxIcon::Question) == System::Windows::Forms::DialogResult::Yes)

{

StreamWriter^ sw = gcnew StreamWriter("datasaved.txt");

sw->WriteLine("Name:" + "\t" + textBox1->Text + " " + textBox2->Text + " " + textBox3->Text);

sw->WriteLine(label5->Text + "\t" + textBox4->Text);

sw->WriteLine(label6->Text + "\t" + textBox5->Text);

sw->WriteLine(label7->Text + "\t" + comboBox1->Text + "/" + comboBox2->Text + "/" + comboBox3->Text);

sw->WriteLine(label8->Text + "\t" + textBox6->Text);

sw->WriteLine(label9->Text + "\t" + comboBox4->Text);

sw->Close();

MyForm2^ y = gcnew MyForm2();

y->Show();

MyForm1::Hide();

}

else

{

MyForm1::Show();

}

}

**Third Form :-**

**Text Box1 :-**

private: System::Void textBox1\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem)

button1->Enabled = true;

}

**Text Box2 :-**

private: System::Void textBox2\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox1->SelectedText&&textBox3->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem)

button1->Enabled = true;

}

**Text Box3 :-**

private: System::Void textBox3\_TextChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox1->SelectedText&&comboBox1->SelectedItem&&comboBox2->SelectedItem)

button1->Enabled = true;

}

**Combo Box1 :-**

private: System::Void comboBox1\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox1->SelectedText&&comboBox2->SelectedItem)

button1->Enabled = true;

}

**Combo Box2 :-**

private: System::Void comboBox2\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (textBox2->SelectedText&&textBox3->SelectedText&&textBox1->SelectedText&&comboBox1->SelectedItem)

button1->Enabled = true;

}

**Buttom1 :-**

private: System::Void button1\_Click(System::Object^ sender, System::EventArgs^ e) {

StreamWriter^ sx = gcnew StreamWriter("datasaved1.txt");

sx->WriteLine(label1->Text + " :"+"\t" + textBox1->Text);

sx->WriteLine(label2->Text + " :" + "\t" + textBox2->Text);

sx->WriteLine(label3->Text + " :" + "\t" + comboBox1->Text + "/" + comboBox2->Text);

sx->WriteLine(label4->Text + " :" + "\t" + textBox3->Text);

sx->Close();

MyForm6^ z= gcnew MyForm6();

z->Show();

MyForm2::Hide();

}

**Last Form :-**

**Buttom1 :-**

private: System::Void button1\_Click(System::Object^ sender, System::EventArgs^ e) {

Application::Exit();

}

**Program Structure**

private: System::Void listBox1\_SelectedIndexChanged(System::Object^ sender, System::EventArgs^ e) {

if (MessageBox::Show("Do you want to book now?", "Ticket booking", MessageBoxButtons::YesNo, MessageBoxIcon::Question)==System::Windows::Forms::DialogResult::Yes)

{

StreamWriter^ sw = gcnew StreamWriter("flsave.txt");

sw->WriteLine(label1->Text +" :" +comboBox1->SelectedItem +"\t" + label2->Text + " :" + comboBox2->SelectedItem);

if (radioButton1->Checked)

{

sw->WriteLine(label3->Text + " :" + dateTimePicker1->Value + "\t" + label4->Text + " :" + dateTimePicker2->Value);

}

else if(radioButton2->Checked)

{

sw->WriteLine(label3->Text + " :" + dateTimePicker1->Value);

}

sw->WriteLine(label7->Text + " :" + comboBox3->SelectedItem);

sw->Close();

MyForm1^ y = gcnew MyForm1();

y->Show();

MyForm::Hide();

}

else

{

MyForm^ y = gcnew MyForm();

y->Show();

MyForm::Hide();

}

}

}

**We use it to view flight schedules available to move from one page to another.**

private: System::Void button1\_Click(System::Object^ sender, System::EventArgs^ e) {

listBox1->Show();

listBox1->Dock;

StreamReader ^sr = gcnew StreamReader("fldata.txt");

while (!sr->EndOfStream)

{

String^ row = Convert::ToString(sr->ReadLine());

array<Char>^ splitter = { '\t' };

array<String^>^ arr = row->Split(splitter);

String^ x = Convert::ToString(dateTimePicker1->Value);

if (x == arr[0])

{

listBox1->Items->Add(arr[1]);

listBox1->Items->Add(arr[2]);

listBox1->Items->Add(arr[3]);

listBox1->Items->Add(arr[4]);

listBox1->Items->Add(arr[5]);

listBox1->Items->Add(arr[6]);

listBox1->Items->Add(arr[7]);

listBox1->Items->Add(arr[8]);

listBox1->Items->Add(arr[9]);

if (comboBox3->Text == "Economy")

{

listBox1->Items->Add(arr[10]);

}

if (comboBox3->Text == "Business")

{

listBox1->Items->Add(arr[11]);

}

if (comboBox3->Text == "First")

{

listBox1->Items->Add(arr[12]);

}

}

}

sr->Close();

CreateControl();

};

**We use it to search for available flights according to the information taken from the customer.**

private: System::Void button1\_Click\_1(System::Object^ sender, System::EventArgs^ e) {

if (MessageBox::Show("Are you sure from information?", "Certainly", MessageBoxButtons::YesNo, MessageBoxIcon::Question) == System::Windows::Forms::DialogResult::Yes)

{

StreamWriter^ sw = gcnew StreamWriter("datasaved.txt");

sw->WriteLine("Name:" + "\t" + textBox1->Text + " " + textBox2->Text + " " + textBox3->Text);

sw->WriteLine(label5->Text + "\t" + textBox4->Text);

sw->WriteLine(label6->Text + "\t" + textBox5->Text);

sw->WriteLine(label7->Text + "\t" + comboBox1->Text + "/" + comboBox2->Text + "/" + comboBox3->Text);

sw->WriteLine(label8->Text + "\t" + textBox6->Text);

sw->WriteLine(label9->Text + "\t" + comboBox4->Text);

sw->Close();

MyForm2^ y = gcnew MyForm2();

y->Show();

MyForm1::Hide();

}

else

{

MyForm1::Show();

}

**We use it to save customer data and take out a message to make sure it is correct.**

**Examples**

**Ex1 :-**

**From : Albania, To : Antarctica,**

**Departing :8/27/2017 12:00:00 AM Returning :8/31/2017 12:00:00 AM**

**Class :Business**

**Name: alhasan gamal farhat**

**E-mail alhasan.gamal@yahoo.com**

**Phone Number 01119353880**

**Date 15/8/1998**

**Passport number 125630789**

**Nationality Egyptian**

**Card Number : 126378**

**Card Holder Name : alhasan**

**Expirty Date : 3/2022**

**CVV No. : 10234**

**Ex2 :-**

**From : Australia, To : Aruba,**

**Departing :8/28/2017 12:00:00 AM**

**Class :First**

**Name: enas gamal ali**

**E-mail enas\_gamal@yahoo.com**

**Phone Number 0103564893**

**Date 20/4/1967**

**Passport number 23045861**

**Nationality Danish**

**Card Number : 533469**

**Card Holder Name : enas**

**Expirty Date : 4/2024**

**CVV No. : 12045**

**Difficulties :**

**We faced lots of difficulity such as less experience , limeted time , coding , we coudent find place to stay and work as a team , lots of difficulity to search for the information .**

**Solving project problem :**

**We faced thes difficult by asking help from our engineer in labs , our friend , we stay for along time in faculty to gain more time , we met in several work shop to finish our project ,**

**We searched for information in the internet .**