

# Programming

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## Introduction

The software development company based in Amman-Jordan that I work for as a software developer, has been awarded a project from an NGO(Non-Governmental Organization) that to help the government move faster towards their digital automation, and my company has been given multiple governmental ministries to choose from which are the Ministry of Health, Ministry of Finance, Ministry of Tourism, Ministry of Foreign affairs and finally the Ministry of Interior, and as the software developer I've been given upon, multiple of colleagues, and each one of us is required to come up with the application to solve it

## Scenario

In my case I've chosen the Ministry Foreign Affairs, considering the fact of how many Jordanians live outside the country, and also discovered that, that number will only increase in the future, keeping in mind that a recent study showed that more than 20% of the Jordanian population wants to migrate out of the country.

## Problem definition and Solution

While seeing the services that the Ministry of Foreign Affairs offers the Jordanian population that's out of Jordan, It was found that whether there'd be a citizen that lives abroad that wants to renew their ID or Passport, or a foreigner applying for a visa to visit family, or work, or just to see Jordan the Ministry of Foreign Affairs plays the unnecessary middle man role between the people and the designated sector. As aforementioned above that their role as the middle man is unnecessary and considering the number of people that use this service, cutting out the Ministry of Foreign Affairs from their role as there middle man will serve a great step in automating the process of the government while also relieving the Ministry from its unimportant role.

## Algorithm Definition

An algorithm is a detailed series of instructions for carrying out an operation or solving a problem” (techopedia, n.d.). In other words, an algorithm is a way to help the user understand how to solve the problem by writing it in an understandable language such as English.

An algorithm is mainly used to help the programmer write a program in many programming languages [an algorithm is not defined by one programming language] by deconstructing the problem to become more understandable for the programmer. For the Programming Assignment code, it is written in Java Swing, and made into an application.

## Algorithm Types:

There are many types of algorithms that a programmer should know in order to write an algorithm, since each programmer has his/her own way of writing an algorithm, in this section I'll be listing 4 most known types of algorithms.

---

### 1. Simple Recursive Algorithms:

A simple recursive algorithm, where recursive means “relating to or involving the repeated application of a rule, definition, or procedure to successive results”, is a type of algorithm that usually solves the base cases directly. Also, it Recurs with a simpler subproblem. Another thing that the recursive algorithm usually do is that is does some extra work to convert the solution to the simpler subproblem into a solution to the given problem. It is called simple because several other types of algorithms are inherently recursive.

here is an example to better explain simple recursive algorithms:

To count the number of elements in a list:

1. If the list is empty, return zero; otherwise,
2. Step past the first element, and count the remaining elements in the list
3. Add one to the result

### 2. Backtracking Algorithms:

“Backtracking is an algorithmic-technique for solving problems recursively by trying to build a solution incrementally, one piece at a time, removing those solutions that fail to satisfy the constraints of the problem at any point of time (by time, here, is referred to the time elapsed till reaching any level of the search tree).” (geeksforgeeks, n.d.)

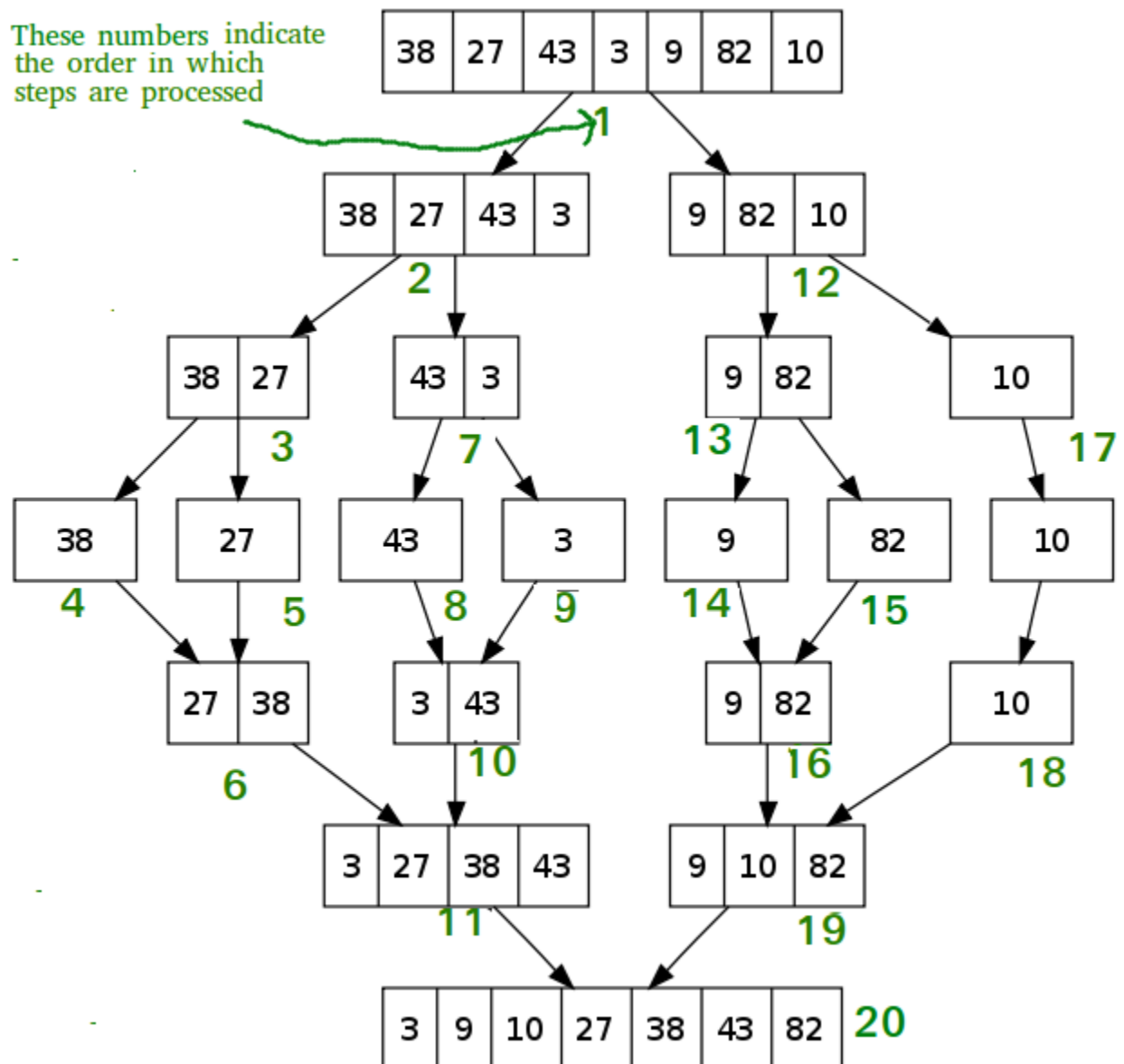
An example of backtracking algorithms is the SudoKo solving problem, where you try Whenever we find that current digit cannot lead to a solution, we remove it (backtrack) and try next digit. This is better than naive approach (generating all possible combinations of digits and then trying every combination one by one) as it drops a set of permutations whenever it backtracks. (geeksforgeeks, n.d.)

### 3. Divide and Conquer Algorithms:

“Divide and Conquer is an algorithmic paradigm. A typical Divide and Conquer algorithm solves a problem using following three steps:

1. Divide: by breaking the problem into subproblem of the same kind.
2. Conquer: Recursively solving these subproblems.
3. Combine: Appropriately combine the answers.

An example of divide and conquer is the Merge Sort. In Merge Sort, we divide array into two halves, sort the two halves recursively, and then merge the sorted halves. (geeksforgeeks, n.d.)



## 4. Brute Force Algorithms:

“Brute Force Algorithms refers to a programming style that does not include any shortcuts to improve performance, but instead relies on sheer computing power to try all possibilities until the solution to a problem is found.” (guide.freecodecamp, n.d.)

An example of a Brute Force Algorithm is the 5-digit password, in the worst-case scenario would take 10 tries to crack.

## Steps from Code to Execution:

Before executing any code, first a programmer needs to follow some essential steps to write the code then executing it. First, we have to identify the problem, we have to know what the problem is before solving it. You see how every program solves the problem, such as word processor where it solves problems in writing, editing and formatting; the program hasn't reached its final goal without identifying what the problem, in my case the problem is that the Ministry of Foreign Affairs plays the unnecessary middle man role between the people and the designated sector.. After identifying what the problem is, next we must identify the user, who will be using the program, in my case the user are Jordanian citizens who lives abroad and foreigners who would like to get a visa. Thirdly, we must determine what OS and IDE to use to write the program, so I'll be using a Windows personal computer (PC) and eclipse IDE, since it has a feature call window builder. Fourthly, we must determine what programming language to use, in my case, I'm going to use Java with all its packages, since it is the leading programming language. Fifthly, you have to represent your problem by either pseudocode or flowchart, in my case I'm going to write my algorithm with Pseudocode. Fifthly, you can write your code, then test and debug the code to ensure that there are no errors or bugs in the system, then finally you can know execute the program successfully.

If you want to execute your program in a successful manner, you have to follow those steps above.



## Algorithm to Code

The following is the algorithm that was then implemented into code using Java programming language:

### Index Page

1. Start
2. Set the location of frame created in the GUI to null
3. Set the frame's visibility to true
4. When the start button is pressed
  1. Set the home page class as an object
  2. Set the Index Page visibility to false
  3. Set the home page visibility as true
5. At any time, the x on the top right is

### Home Page

1. Start
2. Set the frame's visibility to true
3. When the Login button is pressed
  1. Set the Login page class as an object
  2. Set the Home Page visibility to false
  3. Set the Login page location relative to null
  4. Set the Login page visibility as true
4. When the Signup button is pressed
  1. Set the Signup page class as an object
  2. Set the Home Page visibility to false
  3. Set the Signup page location relative to null
  4. Set the Signup page visibility as true
5. At any time, the x on the top right is

### Login Page

1. It is Set the frame's visibility to true from the previous page
2. When the Login button is pressed
  1. Get the username that's inserted from the user and save into a string
  2. Get the password that's inserted from the user and save into a string
  3. Check if the file that's named with the username exists and if the password is correct if both are
  4. Set the Main page class as an object
  5. Set the Login Page visibility to false

6. Set the Main page location relative to null
  7. Set the Main page visibility as true
3. When the Cancel button is pressed
  1. Set the home page class as an object
  2. Set the Login Page visibility to false
  3. Set the home page location relative to null
  4. Set the home page visibility as true
5. At any time, the x on the top right is

## Sign Up Page

1. It is Set the frame's visibility to true from the previous page
2. When the Sign Up button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential that is in the users file
  4. Set the Login page visibility as true
3. When the Cancel button is pressed
  1. Set the Home page class as an object
  2. Set the Sign up Page visibility to false
  3. Set the Home page location relative to null
  4. Set the Home page visibility as true
5. At any time, the x on the top right is

## Main Page

1. It is Set the frame's visibility to true from the previous page
2. When the Passport Renewal button is pressed
  1. Set the Passport Renewal page class as an object
  2. Set the Main Page visibility to false
  3. Set the Passport Renewal page location relative to null
  4. Set the Passport Renewal page visibility as true
3. When the ID Renewal button is pressed
  1. Set the ID Renewal page class as an object
  2. Set the Main Page visibility to false
  3. Set the ID Renewal page location relative to null
  4. Set the ID Renewal page visibility as true

4. When the Visa button is pressed
  1. Set the Visas Menu page class as an object
  2. Set the Main Page visibility to false
  3. Set the Visas Menu page location relative to null
  4. Set the Visas Menu page visibility as true
5. When the Account Change button is pressed
  1. Set the Account Change page class as an object
  2. Set the Menu Page visibility to false
  3. Set the Account Change page location relative to null
  4. Set the Account Change page visibility as true
6. At any time, the x on the top right is

## Passport Renewals

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential in the Passport Renewals file
  4. Set the show a message that the file has been created
3. When the Cancel button is pressed
  1. Set the Main page class as an object
  2. Set the Passport Renewals Page visibility to false
  3. Set the Main page location relative to null
  4. Set the Main page visibility as true
4. At any time, the x on the top right is

## ID Renewals

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential in the ID Renewals file
  4. Set the show a message that the file has been created
3. When the Cancel button is pressed
  1. Set the Main page class as an object

2. Set the ID Renewals Page visibility to false
3. Set the Main page location relative to null
4. Set the Main page visibility as true
4. At any time, the x on the top right is

## Account Settings

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Get the Users initial username input
  3. Identify a file named with the user
  4. Check if the file exists and if it does delete it
  5. Identify a second file with the newly entered username and if it is throw a warning that it cant change the user settings
  6. Write each credential in a string starting with the username and then \n after each credential that is in the users file named with the new username
  7. Set the Login page visibility as true
3. When the Get information button is pressed
  1. Get the initially entered username
  2. Identify a file with the name of the username
  3. Read every line and save each line with its matching credential
  4. Set the strings as the text of the text fields of their matching name
4. When the Cancel button is pressed
  1. Set the Main Page class as an object
  2. Set the Account Settings Page visibility to false
  3. Set the Main Page location relative to null
  4. Set the Main Page visibility as true
4. At any time, the x on the top right is

## Visa Menu

1. It is Set the frame's visibility to true from the previous page
2. When the Work Visas button is pressed
  1. Set the Work Visas page class as an object
  2. Set the Visa Menu Page visibility to false
  3. Set the Work Visas page location relative to null

4. Set the Work Visas page visibility as true
3. When the Family Visas button is pressed
  1. Set the Family Visas page class as an object
  2. Set the Visa Menu Page visibility to false
  3. Set the Family Visas page location relative to null
  4. Set the Family Visas page visibility as true
4. When the Tourism Visa button is pressed
  1. Set the Tourism Visa page class as an object
  2. Set the Visa Menu Page visibility to false
  3. Set the Tourism Visa page location relative to null
  4. Set the Tourism Visa page visibility as true
5. When the Cancel button is pressed
  1. Set the Main page class as an object
  2. Set the Visas Menu visibility to false
  3. Set the Main page location relative to null
  4. Set the Main page visibility as true
6. At any time, the x on the top right is

## Work Visas

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential in the Work Visas file
  4. Set the show a message that the file has been created
3. When the Cancel button is pressed
  1. Set the Main page class as an object
  2. Set the Work Visas Page visibility to false
  3. Set the Main page location relative to null
  4. Set the Main page visibility as true
4. At any time, the x on the top right is

## Family Visas

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential in the Family Visas file
  4. Set the show a message that the file has been created
3. When the Cancel button is pressed
  1. Set the Main page class as an object
  2. Set the Family Page visibility to false
  3. Set the Main page location relative to null
  4. Set the Main page visibility as true
4. At any time, the x on the top right is

## Visit Visas

1. It is Set the frame's visibility to true from the previous page
2. When the Submit button is pressed
  1. Save each credential in a string
  2. Identify a file
  3. Write each credential in a string starting with the username and then \n after each credential Visit Visas
  4. Set the show a message that the file has been created
3. When the Cancel button is pressed
  1. Set the Main page class as an object
  2. Set the Visit Visas Page visibility to false
  3. Set the Main page location relative to null
  4. Set the Main page visibility as true
4. At any time, the x on the top right is

# Types of Paradigms

The word paradigm is a term that means a way of finding a solution to a problem, the programming paradigms are the strategies or ways of solving problems in programming techniques. (Rani, 2018).

## Definition & Characteristics

### Procedural

Procedural Programming is the one of the programming paradigms that works and leads a device to know how to finish tasks in some logistic steps. This paradigm deals with procedures and data as two different entities as it divides a program to a procedure and contains several steps to be carried out. In other words, we can say that the procedural programming gives a devices instruction on how to do a step by step to get tasks done. (Bhatia, 2020)

Characteristics of procedural programming:

- 1- Procedural programming focuses on how (the process) to finish things rather than the data itself. (Li, 2018)
- 2- The program focuses of how the base of action is implemented is by reading, calculating. As well as printing. It also focuses on how to write and solve a program from upper to bottom. (Li, 2018)
- 3- Sometimes, we should consider that the global data is viewed by all functions. (Li, 2018)
- 4- Data can move from function to another one. (Li, 2018)

### Object Oriented

The way that Object-oriented programming works is it sees programming as tons of objects which works together to solve a certain problem. But the idea of OOP is that the components that work with the objects exists within itself. Objects can be also taken from a program that they solve a problem to this program to another one that solves another program. (Bhatia, 2020)

Characteristics of OOP:

- 1- OOP defines classes as having the operations with data and which the data itself. (Ride, 2019)
- 2- OOP uses objects is instants of a class that are used in a real functionality. (Ride, 2019)
- 3- Abstraction as determining on what to do but without the way as it's a flexible feature that views the functionalities of objects. (Ride, 2019)
- 4- Encapsulation as combining data and operations of data with each other to perform a single unit. (Ride, 2019)
- 5- Inheritance and class hierarchy as an extension of quitting classes. (Ride, 2019)

- 6- Polymorphism as having more than one definition and using them as one and also as being functions with the same name and different functionalities to have more function name, operators and functions in a time-shortage. (Ride, 2019)
- 7- Generic Classes as defining classes with unspecified data as container classes and being flexible and used again. (Ride, 2019)
- 8- Class libraries as having built-in language specific classes (Ride, 2019)
- 9- Passing messages as objects communicating throughout having ways to send data to them and receiving data among objects through function parameters. (Ride, 2019)

## Event Driven

Event driven Programming is one of the programming paradigms that have a group of program executions that is defined by events. (UK, 2020)

Event Driven applications are created to find events and deal with them using an Event Handling procedure. Many programming languages can make an event driven programs and with different languages to be designed for event driven programming and to provide to an IDE to automate a program. (UK, 2020)

Languages that are used to create an event driven program: **Visual Basic, Visual C++ and Java**

Characteristics of Event Driven:

- 1- Service-oriented as separating complex problems. (Colleges, 2018)
- 2- Events, loops and handlers as to wait for an event to happen and calling an event handler to execute the program. (Colleges, 2018)
- 3- Time-Driven events as generating time driven and how long between events to be generated. (Colleges, 2018)
- 4- Trigger functions as responding to events and having an event handler. (Colleges, 2018)

## Relation between them

Procedural programming defines a program as steps, and declarative programming describes the outcome without talking about steps that had that outcome. On the other hand, OOP organizes the code as standards of encapsulation, substitution, inheritance and from programming to interfaces. Object oriented programs usually are procedural. Event driven is to write and handle procedures and to have loops to understand a system as writing an event loop. Event driven are usually used to write Object Oriented style. (Vandermeer, 2018).



## Source Code Example

### Procedural

To better represent procedural programming paradigm, here are some screenshots from a java swing code that I build for the application for Ministry of Foreign Affairs.

```
File newFile = new File("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Users\\" + userFirst + ".txt");
newFile.delete();

FileWriter fileWriter = new FileWriter ("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Users\\" + username + ".txt");

fileWriter.write(username + "\n");
fileWriter.write(password + "\n");
fileWriter.write(firstName + "\n");
fileWriter.write(fatherName + "\n");
fileWriter.write(grandName + "\n");
fileWriter.write(lastName + "\n");
fileWriter.write(ssn + "\n");
fileWriter.write(email + "\n");
fileWriter.write(phone + "\n");
fileWriter.write(country + "\n");
fileWriter.write(city + "\n");

fileWriter.close();

JOptionPane.showMessageDialog(null, "Thank you, your credentials have been changed");
}

} catch (IOException e1) {
    // TODO Auto-generated catch block
    e1.printStackTrace();
}
```

### Object Oriented

To better represent Object Oriented programming paradigm, here are some screenshots from a java swing code that I build for the application for Ministry of Foreign Affairs.

```
public void actionPerformed(ActionEvent e)
{
    MainPage main = new MainPage();
    setVisible(false);
    main.setLocationRelativeTo(null);
    main.setVisible(true);
}
});
```

### Event Driven

To better represent Event Driven programming paradigm, here are some screenshots from a java swing code that I build for the application for Ministry of Foreign Affairs.

```

setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setBounds(100, 100, 792, 535);
contentPane = new JPanel();
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);

JPanel panel = new JPanel();
panel.setBounds(10, 11, 756, 474);
contentPane.add(panel);
panel.setLayout(null);

JLabel label = new JLabel("First Name :");
label.setFont(new Font("Tahoma", Font.PLAIN, 14));
label.setBounds(10, 112, 81, 23);
panel.add(label);

txtfirst = new JTextField();
txtfirst.setFont(new Font("Tahoma", Font.PLAIN, 14));
txtfirst.setColumns(10);
txtfirst.setBounds(159, 115, 127, 20);
panel.add(txtfirst);

JLabel label_1 = new JLabel("Father's Name :");
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
label_1.setBounds(10, 140, 101, 23);
panel.add(label_1);

txtfather = new JTextField();
txtfather.setFont(new Font("Tahoma", Font.PLAIN, 14));
txtfather.setColumns(10);
txtfather.setBounds(159, 149, 127, 20);
panel.add(txtfather);

JLabel label_2 = new JLabel("Grandfather's Name :");
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
label_2.setBounds(10, 174, 139, 23);
panel.add(label_2);

txtgrand = new JTextField();
txtgrand.setFont(new Font("Tahoma", Font.PLAIN, 14));
txtgrand.setColumns(10);
txtgrand.setBounds(159, 177, 127, 20);
panel.add(txtgrand);

```

## Comparing and Contrasting:

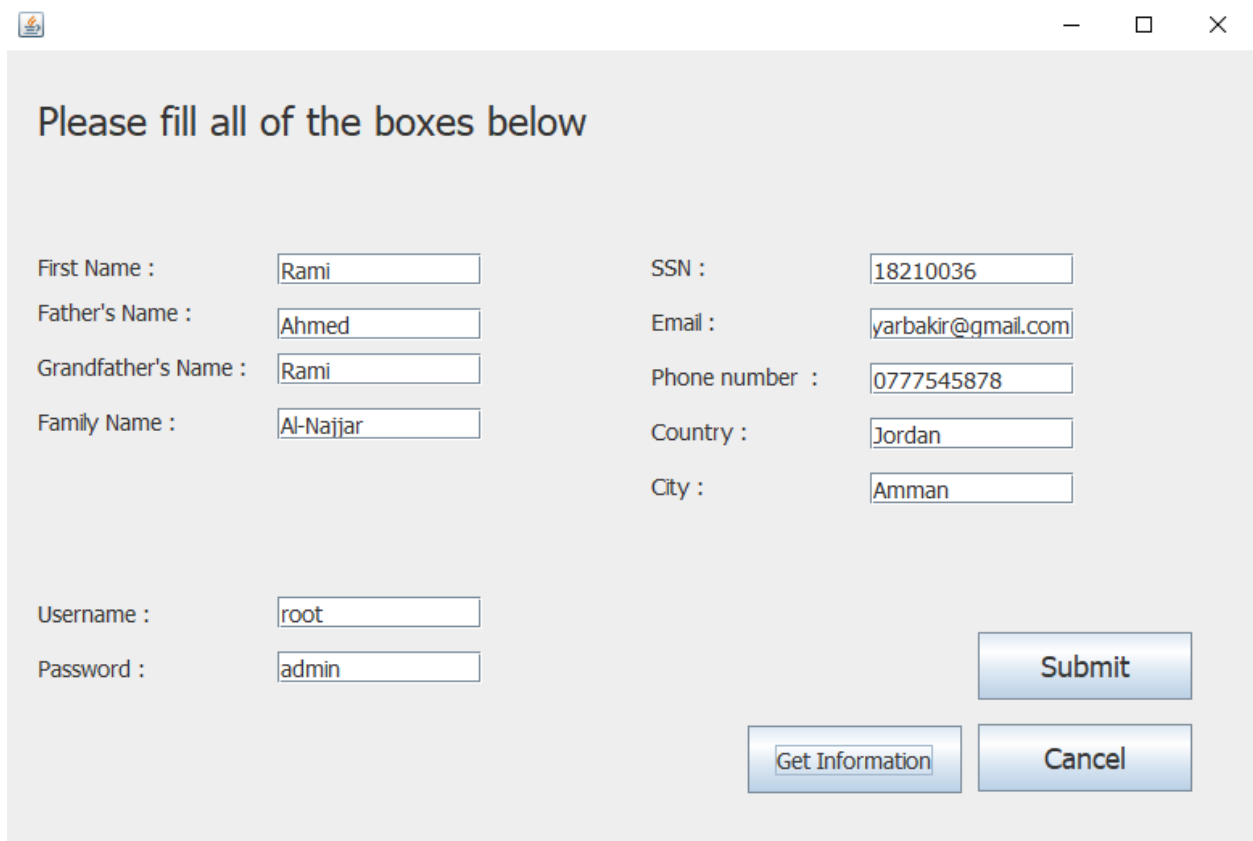
Each programming paradigm differs from the other, the main difference between each programming paradigm is the way that they are described. A procedural program describes how to do something step by step, an event-driven program describes what to do when an external situation comes to pass and an object-oriented program models everything as the interaction of

objects with defined attributes and means of being manipulated. As shown in the screenshots that described these programming paradigms.

## Critical Evaluation

As shown in the screenshots I used procedural programming for all the backend and object oriented programming polymorphism for linking the Jframes together and inheritance for calling carriable from on class to another, and finally I used java swing and awt using window builder for the event drivin programming. I think that any application should be built with those three main paradigms because they intertwine perfectly together.

## Mock-ups



Please fill all of the boxes below

First Name :	<input type="text" value="Rami"/>	SSN :	<input type="text" value="18210036"/>
Father's Name :	<input type="text" value="Ahmed"/>	Email :	<input type="text" value="yarbakir@gmail.com"/>
Grandfather's Name :	<input type="text" value="Rami"/>	Phone number :	<input type="text" value="0777545878"/>
Family Name :	<input type="text" value="Al-Najjar"/>	Country :	<input type="text" value="Jordan"/>
		City :	<input type="text" value="Amman"/>
Username :	<input type="text" value="root"/>		
Password :	<input type="text" value="admin"/>		



## Friends and Family Visas :

First Name :

Father's Name :

GrandFather's Name :

Last Name :

SSN :

Date of Birth

Passport number :

How many entries :

Visa Duration :

Passport Scan (Google Drive Link)

Photo Scan (Google Drive Link)

Family/Friend Letter (Google Drive Link)

Submit

Back




Please Choose one of the following options

If you already have an  
account please:

Login


If you don't have an  
account then please:

Sign Up


— □ ×

## ID Renewals :

First Name :	<input type="text"/>	ID Scan (Google Drive Link)	<input type="text"/>
Father's Name :	<input type="text"/>		
GrandFather's Name :	<input type="text"/>		
Last Name :	<input type="text"/>		
SSN :	<input type="text"/>	Photo Scan (Google Drive Link)	<input type="text"/>
ID number :	<input type="text"/>		
Date of Birth :	<input type="text"/>		

— □ ×

## Welcome to the Ministry of Foreign Affairs

— □ ×


Please enter your username and password:

Username :

Password :

Cancel

Login

— □ ×

Welcome

Account Settings

Please Choose one of the options below :

Passport Renewals

ID Renewals

Visas

—□×

## Passport Renewals :

First Name :

Father's Name :

GrandFather's Name :

Last Name :

SSN :

Passport number :

Date of Birth :

Passport Scan (Google Drive Link)

Photo Scan (Google Drive Link)

Back

Submit

—□×

## Please fill all of the boxes below

First Name :

Father's Name :

Grandfather's Name :

Family Name :

Nationality :

SSN :

Email :

Phone number :

Country :

City :

Username :

Password :

Submit

Clear all

Cancel



Choose the Type of Visa that you are applying for :

Work

Tourism

Family/Friends

Back



### Visitation Visas :

First Name :

Father's Name :

GrandFather's Name :

Last Name :

SSN :

Date of Birth :

Passport number :

How many entries :

Visa Duration :

Passport Scan (Google Drive Link)

Photo Scan (Google Drive Link)

Hotel Reservation Scan (Google Drive Link)

Submit

Back



Work Visas :

First Name :

Father's Name :

GrandFather's Name :

Last Name :

SSN :

Date of Birth

Passport number :

How many entries :

Visa Duration :

Submit

Back

Passport Scan (Google Drive Link)

Photo Scan (Google Drive Link)

Business Letter (Google Drive Link)

## View Map:

```
graph LR; IndexPage --> HomePage; HomePage --> Login; HomePage --> Signup; Signup --> HomePage; Login --> MainPage; MainPage --> PassportRenewals; MainPage --> IDRenewals; MainPage --> VisasMenu; MainPage --> AccountSettings; VisasMenu --> WorkVisas; VisasMenu --> FamilyVisas; VisasMenu --> VisitVisas;
```

The flowchart illustrates the application's navigation structure. It begins with an **IndexPage** that leads to the **HomePage**. From the **HomePage**, users can proceed to **Login** or **Signup**. The **Signup** path loops back to the **HomePage**. The **Login** path leads to the **MainPage**. From the **MainPage**, users can access **Passport Renewals**, **ID Renewals**, **VisasMenu**, or **Account Settings**. The **VisasMenu** further branches into **Work Visas**, **Family Visas**, and **Visit Visas**.

## Wireframes:

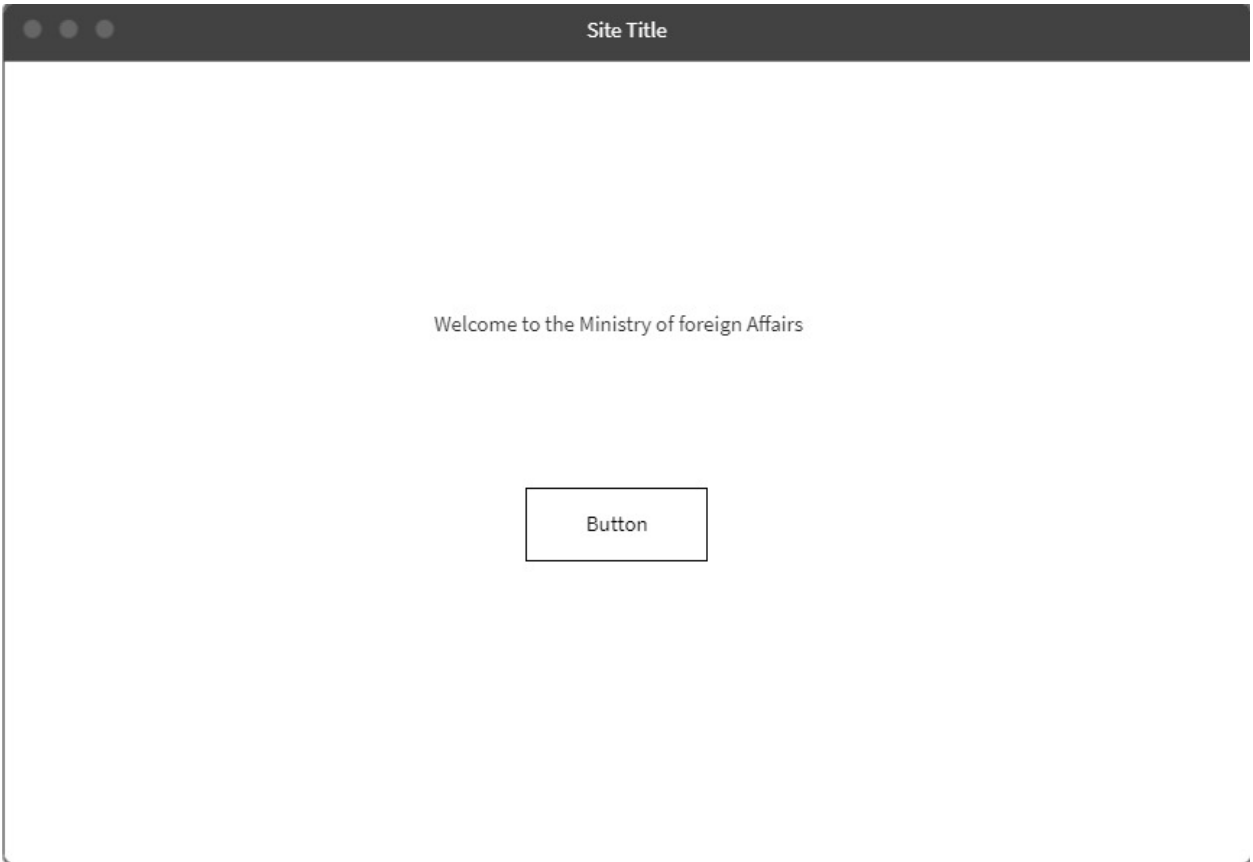
Delete selected...

Save Changes

please choose one of the options below :

login

sign up



Site Title

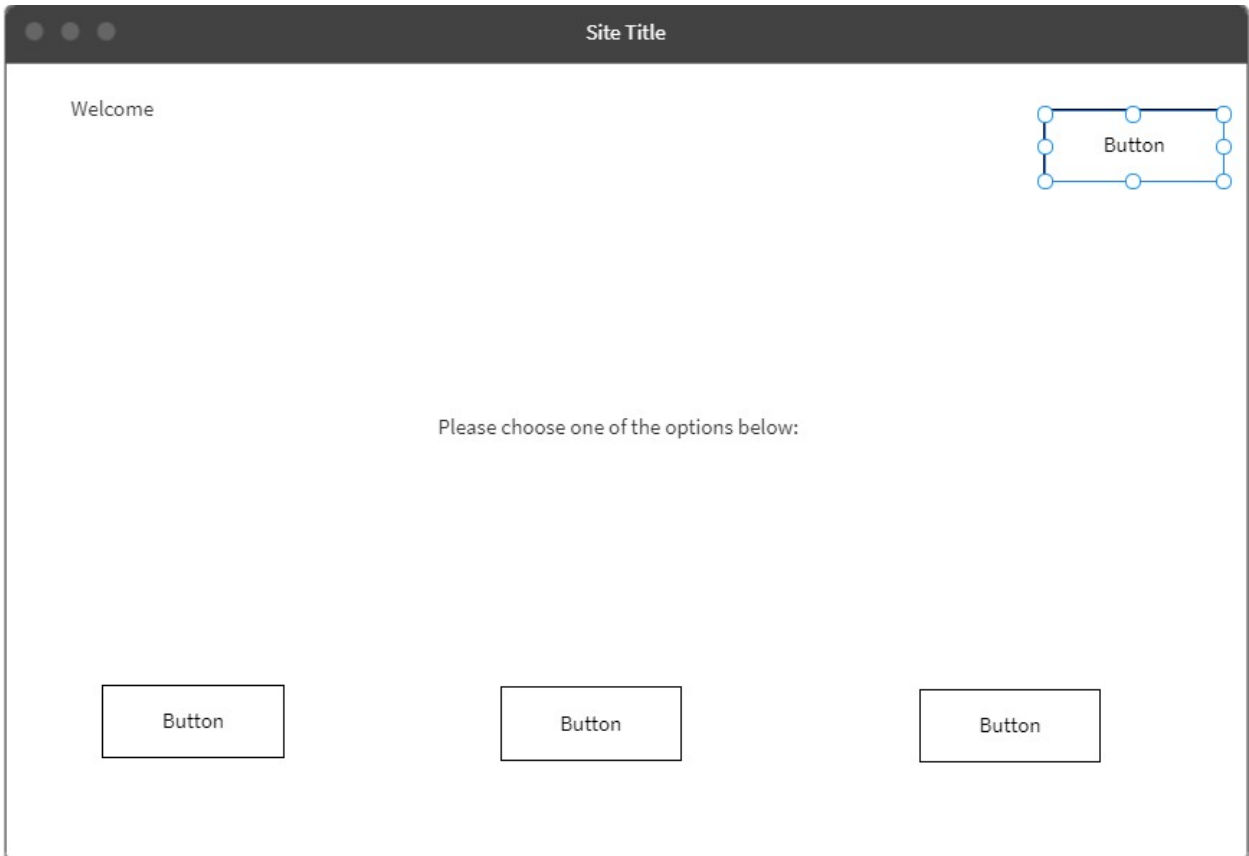
Please enter your username and password

username

password

Button

Button



Site Title

First name	<input type="text"/>	SSN	<input type="text"/>
father's Name	<input type="text"/>	Email	<input type="text"/>
Grand father name	<input type="text"/>	phone number	<input type="text"/>
family name	<input type="text"/>	country	<input type="text"/>
nationality	<input type="text"/>	city	<input type="text"/>
User name		<input type="text"/>	
password		<input type="text"/>	
		<input type="button" value="Button"/>	
		<input type="button" value="Button"/>	
		<input type="button" value="Button"/>	

Site Title

First name

father's Name

Grand father name

family name

SSN

DOB

passport number

How many entries

city

visa Duration

Button

Button

Passport scan(google Drive link)

photo scan(google Drive link)

family letter(google Drive link)

Site Title

Save Changes

ID Renewals

First name

father's Name

Grand father name

family name

SSN

DOB

ID number

ID scan(google Drive link)

photo scan(google Drive link)

Button

Button



Site Title

Save Changes

passport Renewals

First name

father's Name

Grand father name

family name

SSN

DOB

passport number

Passport scan(google Drive link)

photo scan(google Drive link)

Button

Button

work Visas

First name	<input type="text"/>
father's Name	<input type="text"/>
Grand father name	<input type="text"/>
family name	<input type="text"/>
SSN	<input type="text"/>
DOB	<input type="text"/>
passport number	<input type="text"/>
How many entries	<input type="text"/>
Visa Duration	<input type="text"/>

Button

Button

Passport scan(google Drive link)

photo scan(google Drive link)

Business letter(google Drive link)

Site Title

Save Changes

friend and family visas

First name

father's  
Name

Grand father name

family  
name

SSN

DOB

passport  
number

How many  
entries

Visa  
Duration

Button

Button

Passport scan(google Drive link)

photo scan(google Drive link)

family\ friend letter(google Drive link)

Site Title

Save Changes

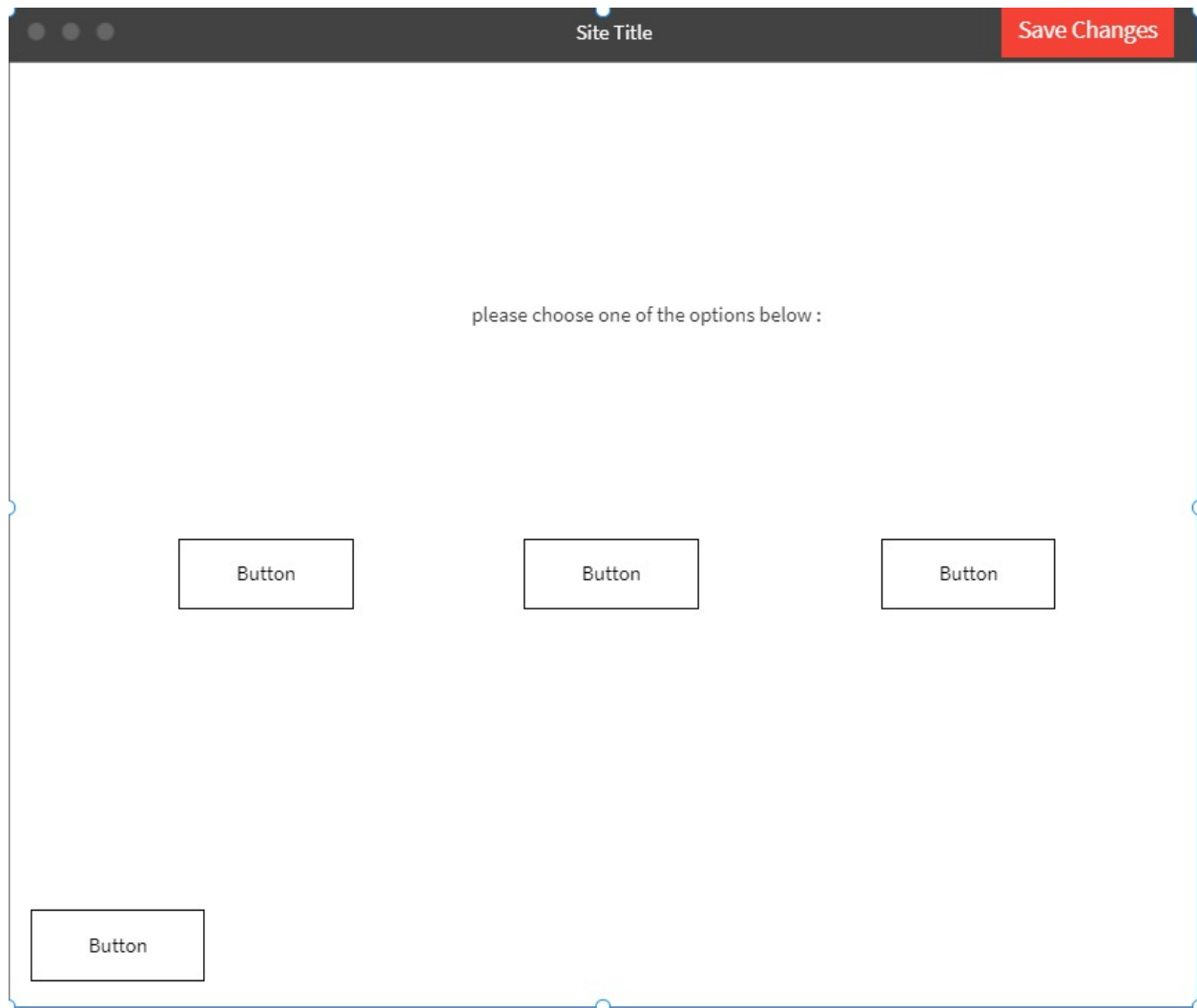
choose the Type Visa that you are applying for:

Button

Button

Button

Button



## Written Code

The code will be inputted in Appendix A

## IDE Use:

“An IDE, or Integrated Development Environment, enables programmers to consolidate the different aspects of writing a computer program, it increases programmer productivity by combining common activities of writing software into a single application: editing source code, building executables, and debugging” (codecademy, n.d.). IDE’s are more convenient to use for a programmer than a common terminal; because it has features like auto-complete, in which it

completes the syntax for the user and give instructions on how to use it, for example, in C if the user wants to know how to use the IF statement or what parameters he/she should put, the IDE will give all the instructions needed. The IDE that I'm going to use is Eclipse for Java development.

Here are the main Features of an IDE that differentiate it from writing on a terminal:

## 1. Editing Source Code:

For editing the source, the IDE couldn't make it much easier, IDEs facilitate this process with features like syntax highlighting and autocomplete (codecademy, n.d.).

### A. For syntax highlighting:

An IDE that knows the syntax of your language can provide visual cues. Keywords, words that have special meaning like class in python or a comment in C is different than in Python, are highlighted with different colors. Syntax highlighting makes code easier to read by visually clarifying different elements of language syntax (codecademy, n.d.).

### B. For Auto-complete:

As mentioned above, an IDE can anticipate what function are you trying to write, the feature allows the programmer to finish his/her code much faster.

## 2. Having vast numbers of compilers:

The best thing of writing your code in IDE is that you'll have so many compilers to chose from, from C to C# to Python 2 or 3 and so much more. This feature is very helpful for any programmer; because in terminal you'll have to remember how to compile your code [for example, to compile a code in C, you'll have to write gcc FileName] whereas in an IDE you just have to select the compiler that your code is based on and it will compile it for you plus give you the output.

### 3. Debugging:

When a program does not run correctly, IDEs provide debugging tools that allow programmers to examine different variables and inspect their code in a deliberate way (codecademy, n.d.). whereas in a terminal you'll have to look for the problem for yourself which can take a lot of time.

### 4. Building Executables and File Manager:

IDEs provide automated build processes for languages, so the act of compiling and executing code is abstracted away. For example, if your code is written in C, it would be saved as FileName.C (codecademy, n.d.).

To summarize it even further, here is a table that shows all the differences between an IDE and a Terminal:

Terminal/DOS	IDE
The debugging process needs to happen manually	The debugging process is automated
Doesn't have or not quite colors for identification [especially Windows terminal]	Has colors for identification which are subtle so there will be strain on the eyes
Need to memorize the functions or research them to write a code	Automated completion of the function including hints and syntax of the function
The need to memorize or research the way to compile the code	No need for memorization to know how to compile since the IDE already know the language used to write the code, all you need to do is click Run
Static updates, meaning that the administrator needs to install the packages updates manually which sometimes results in outdated version being used.	Dynamic updates, meaning that the IDE will update the packages automatically which results in updated versions
Harder, ancient more complex to use	Easier, modern and less complex to use

Already built in the software	Needs to be downloaded
-------------------------------	------------------------

## Debugging in Eclipse

Debugging is the process of locating and removing bugs, errors or abnormalities from programs. It's a must have skill for any Java developer because it helps to find subtle bug that are not visible during code reviews or that only happens when a specific condition occurs. The Eclipse Java IDE provides many debugging tools and views grouped in the Debug Perspective to help the you as a developer debug effectively and efficiently. There are some steps to help started debugging a java program: (Sinha, n.d.)

- 1- Launch and debug a java code by using Debug as or ALT+SHIFT+D, J
- 2- Adding breaking points that is the signal to tell the debugger to stop running the program in these breaking points. (Sinha, n.d.)
- 3- Debugging perspective is to debug view as visualizing call stacks and giving operations, showing all breakpoints, and variable or expression view and displaying view, console view. (Sinha, n.d.)
- 4- Binding key shortcuts to control running the program. (Sinha, n.d.)

## Debugging Evaluation

We used debugging because it's the process that involves identifying problem and finding the source of the problem and finding a solution for that problem. So, we start by testing to make sure and identify if there is an errors or bugs is the code. I used eclipse because it. Has many functionalities such as adding Breaking points, code line by line or method by method in case that there was a method inserted. Into another one. Debugging a very important step for developers which makes it necessary and testing until all error are solved

## Coding Standard Definition

"Coding standards are collections of coding rules, guidelines, and best practices. Using the right coding standard helps you write cleaner code" (Dixit, 2018). And rules which helps the developers to run a code smoothly and in an efficient way.



## Coding Standard Used

Java Syntax	Implementation
<b>File</b>	Files were identified with the name file
<b>Scanners</b>	Scanners were identified with the name scan
<b>File Writers</b>	File writers were identified with the name fileWriter
<b>Strings</b>	Strings were named after what they contain (e.g. a string that contains the username was named as such)
<b>File Readers</b>	File readers were identified with the name fileReader
<b>Text Fields</b>	Text fields were identified with the name txt followed by the content that is going to be entered (e.g. the text field were the username is going to be entered is going to be named txtUser)
<b>Java GUI</b>	All the GUI of the App was developed using window builder, so it had the basic syntax that is always entered with it

All these Coding standards were used in order to have the code as clear and understandable as possible.

## Critical Evaluation

Coding standards is important because without using coding standards the code would be as effective as having coding standards. And if one of the team of developers are working on a program that Is huge, using coding standards will help separating the code to the team members which will help them to develop it better. Also giving the coding standards such as naming variables is important which will relate to the parts of the program and for the code to be efficient while debugging.

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## Appendix (A: Source Code)

### IndexPage Source Code:

The following is the source for the IndexPage

```
package assignmentFinal;
```

```
import java.awt.EventQueue;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JPanel;
```

```
import javax.swing.JLabel;
```

```
import java.awt.Font;
```

```
import javax.swing.border.BevelBorder;
```

```
import java.awt.Color;
```

```
import javax.swing.JButton;
```

```
import java.awt.event.ActionListener;
```

```
import java.awt.event.ActionEvent;
```

```
public class IndexPage {
```

```
    private JFrame frame;
```

```
    /**
```

```
     * Launch the application.
```

```
    */
```

```
public static void main(String[] args) {  
    EventQueue.invokeLater(new Runnable() {  
        public void run() {  
            try {  
                IndexPage window = new IndexPage();  
                window.frame.setVisible(true);  
            } catch (Exception e) {  
                e.printStackTrace();  
            }  
        }  
    });  
}
```

```
/**
```

```
 * Create the application.
```

```
 */
```

```
public IndexPage() {
```

```
    initialize();
```

```
}
```

```
/**
```

```
 * Initialize the contents of the frame.
```

```
 */
```

```
private void initialize() {
```

```

frame = new JFrame();

frame.setBounds(100, 100, 792, 535);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

frame.getContentPane().setLayout(null);

frame.setLocationRelativeTo(null);


JPanel panel = new JPanel();

panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,
null, null));

panel.setBounds(102, 89, 561, 259);

frame.getContentPane().add(panel);

panel.setLayout(null);


JLabel lblWelcomeToThe = new JLabel("Welcome to the Ministry of Foreign
Affairs");

lblWelcomeToThe.setFont(new Font("Tahoma", Font.PLAIN, 24));

lblWelcomeToThe.setBounds(59, 25, 460, 59);

panel.add(lblWelcomeToThe);


JButton btnStart = new JButton("Start");

btnStart.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e) {

        HomePage homePage = new HomePage ();

```

```

        frame.setVisible(false);

        homePage.setLocationRelativeTo(null);

        homePage.setVisible(true);

    }

});

btnStart.setBounds(207, 163, 149, 49);

panel.add(btnStart);

}

}

```

## Home Page

The following is the source for the HomePage

```

package assignmentFinal;

import java.awt.BorderLayout;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import java.awt.Panel;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.border.BevelBorder;
import java.awt.Color;
import javax.swing.JButton;

```

```
import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;


public class HomePage extends JFrame {


    private JPanel contentPane;


    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    HomePage frame = new HomePage();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }


    /**
```



\* Create the frame.

\*/

```
public HomePage() {  
  
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
  
    setBounds(100, 100, 792, 535);  
  
    contentPane = new JPanel();  
  
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));  
  
    setContentPane(contentPane);  
  
    contentPane.setLayout(null);  
  
  
    JLabel label = new JLabel("Please Choose one of the following options");  
  
    label.setFont(new Font("Tahoma", Font.PLAIN, 24));  
  
    label.setBounds(146, 55, 485, 42);  
  
    contentPane.add(label);  
  
  
  
    JPanel panel = new JPanel();  
  
    panel.setLayout(null);  
  
    panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,  
null, null));  
  
    panel.setBounds(97, 163, 226, 229);  
  
    contentPane.add(panel);  
  
  
  
    JLabel label_1 = new JLabel("If you already have an");  
  
    label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
    label_1.setBounds(36, 11, 180, 53);
```

```
panel.add(label_1);
```

```
JLabel label_2 = new JLabel("account please:");
```

```
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_2.setBounds(36, 51, 154, 26);
```

```
panel.add(label_2);
```

```
JButton button = new JButton("Login");
```

```
button.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        LoginPage log = new LoginPage ();
```

```
        setVisible(false);
```

```
        log.setLocationRelativeTo(null);
```

```
        log.setVisible(true);
```

```
    }
```

```
});
```

```
button.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
button.setBounds(36, 118, 145, 42);
```

```
panel.add(button);
```

```
JPanel panel_1 = new JPanel();
```

```
panel_1.setLayout(null);
```

```
panel_1.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK,  
null, null, null));
```

```
panel_1.setBounds(448, 163, 226, 229);
```

```
contentPane.add(panel_1);
```

```
JLabel label_3 = new JLabel("If you don't have an");
```

```
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_3.setBounds(22, 11, 180, 53);
```

```
panel_1.add(label_3);
```

```
JLabel label_4 = new JLabel("account then please:");
```

```
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_4.setBounds(22, 56, 154, 26);
```

```
panel_1.add(label_4);
```

```
JButton button_1 = new JButton("Sign Up");
```

```
button_1.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        SignUpPage sign = new SignUpPage ();
```

```
        setVisible(false);
```

```
        sign.setLocationRelativeTo(null);
```

```
        sign.setVisible(true);
```

```
    }
```

```
});
```

```
button_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
        button_1.setBounds(31, 119, 145, 42);

        panel_1.add(button_1);

    }

}
```

## Login Page

The following is the source for the LoginPage

```
package assignmentFinal;

import java.awt.BorderLayout;
import javax.swing.JOptionPane;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.border.BevelBorder;
import java.awt.Color;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.JTextField;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.io.*;
import java.util.Scanner;
```

```
import javax.swing.JPasswordField;

import java.io.FileNotFoundException;

public class LoginPage extends JFrame {

    private JPanel contentPane;

    public static JTextField txtUser;

    private JPasswordField txtPass;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    LoginPage frame = new LoginPage();
                    frame.setLocationRelativeTo(null);
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }
}
```

```

    }

    /**
     * Create the frame.
     */
    public LoginPage() {

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 792, 535);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JPanel panel = new JPanel();
        panel.setBorder(new BevelBorder(BevelBorder.RAISED, Color.BLACK, null,
null, null));
        panel.setBounds(10, 11, 756, 474);
        contentPane.add(panel);
        panel.setLayout(null);

        JLabel lblPleaseEnterYour = new JLabel("Please enter your username and
password:");
        lblPleaseEnterYour.setFont(new Font("Tahoma", Font.PLAIN, 24));
        lblPleaseEnterYour.setBounds(10, 11, 538, 79);

```

```
panel.add(lblPleaseEnterYour);
```

```
JLabel label = new JLabel("Username :");
```

```
label.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label.setBounds(10, 144, 81, 23);
```

```
panel.add(label);
```

```
JLabel label_1 = new JLabel("Password :");
```

```
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_1.setBounds(10, 246, 81, 23);
```

```
panel.add(label_1);
```

```
txtUser = new JTextField();
```

```
txtUser.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtUser.setColumns(10);
```

```
txtUser.setBounds(142, 147, 127, 20);
```

```
panel.add(txtUser);
```

```
JButton btnLogin = new JButton("Login");
```

```
btnLogin.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        try {
```

```
String usernameinput = txtUser.getText();
```

```
String passwordinput = txtPass.getText();
```

```
File file = new File ("C:/Users/user/eclipse-  
workspace/assignment/src/Text Files/Users/" + usernameinput + ".txt");
```

```
Scanner scan = new Scanner (file);
```

```
String user = scan.nextLine();
```

```
String pass = scan.nextLine();
```

```
if (file.exists() && pass.equals(passwordinput))
```

```
{
```

```
    MainPage main = new MainPage ();
```

```
        setVisible (false);
```

```
        main.setLocationRelativeTo(null);
```

```
        main.setVisible(true);
```

```
}
```

```
else if (file.exists())
```

```
{
```

```
        JOptionPane.showMessageDialog (null, "Password  
Incorrect");
```



```

    }

    scan.close();

    } catch (FileNotFoundException e1) {

        JOptionPane.showMessageDialog(null, "Username Does
not exist");

    }

    // TODO Auto-generated catch block

    //e1.printStackTrace();

    }

});

btnLogin.setFont(new Font("Tahoma", Font.PLAIN, 18));

btnLogin.setBounds(585, 377, 161, 49);

panel.add(btnLogin);

JButton btnCancel = new JButton("Cancel");

btnCancel.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        HomePage homePage = new HomePage();

        setVisible (false);

        homePage.setLocationRelativeTo(null);

```

```

        homePage.setVisible(true);
    }

});

btnCancel.setFont(new Font("Tahoma", Font.PLAIN, 18));

btnCancel.setBounds(10, 377, 161, 49);

panel.add(btnCancel);

txtPass = new JPasswordField();

txtPass.setBounds(142, 249, 127, 20);

panel.add(txtPass);
}

```

```

}

```

## Sign Up Page

The following is the source for the SignUpPage

```

package assignmentFinal;

import java.awt.BorderLayout;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;

```

```
import javax.swing.border.EmptyBorder;

import javax.swing.border.BevelBorder;

import java.awt.Color;

import javax.swing.JLabel;

import javax.swing.JOptionPane;


import java.awt.Font;

import javax.swing.JTextField;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;

import java.io.*;

import java.util.Scanner;

public class SignUpPage extends JFrame
{
```

```
    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtemail;
```

```
private JTextField txtnumber;

private JTextField txtcountry;

private JTextField txtcity;

private JTextField txtpass;

private JTextField txtuser;

private JTextField txtnation;


/**
 * Launch the application.
 */
public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                SignUpPage frame = new SignUpPage();
                frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}
```

```
public SignUpPage() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);


    JPanel panel = new JPanel();

    panel.setBorder(new BevelBorder(BevelBorder.RAISED, Color.BLACK, null,
null, null));

    panel.setBounds(10, 11, 756, 474);

    contentPane.add(panel);

    panel.setLayout(null);


    JLabel lblPleaseFillAll = new JLabel("Please fill all of the boxes below");

    lblPleaseFillAll.setFont(new Font("Tahoma", Font.PLAIN, 24));

    lblPleaseFillAll.setBounds(10, 11, 395, 42);

    panel.add(lblPleaseFillAll);


    JLabel lblFirstName = new JLabel("First Name :");

    lblFirstName.setFont(new Font("Tahoma", Font.PLAIN, 14));

    lblFirstName.setBounds(10, 112, 81, 23);

    panel.add(lblFirstName);
```

```
JLabel lblFathersName = new JLabel("Father's Name :");  
  
lblFathersName.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
lblFathersName.setBounds(10, 140, 101, 23);  
  
panel.add(lblFathersName);
```

```
JLabel lblGrandfathersName = new JLabel("Grandfather's Name :");  
  
lblGrandfathersName.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
lblGrandfathersName.setBounds(10, 174, 139, 23);  
  
panel.add(lblGrandfathersName);
```

```
JLabel lblFamilyName = new JLabel("Family Name :");  
  
lblFamilyName.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
lblFamilyName.setBounds(10, 208, 139, 23);  
  
panel.add(lblFamilyName);
```

```
JLabel lblSsn = new JLabel("SSN :");  
  
lblSsn.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
lblSsn.setBounds(391, 112, 81, 23);  
  
panel.add(lblSsn);
```

```
JLabel lblEmail = new JLabel("Email :");  
  
lblEmail.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
lblEmail.setBounds(391, 146, 81, 23);
```

```
panel.add(lblEmail);
```

```
JLabel lblPhoneNumber = new JLabel("Phone number :");
```

```
lblPhoneNumber.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblPhoneNumber.setBounds(391, 180, 110, 23);
```

```
panel.add(lblPhoneNumber);
```

```
JLabel lblUsername = new JLabel("Username :");
```

```
lblUsername.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblUsername.setBounds(10, 327, 81, 23);
```

```
panel.add(lblUsername);
```

```
JLabel lblPassword = new JLabel("Password :");
```

```
lblPassword.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblPassword.setBounds(10, 361, 81, 23);
```

```
panel.add(lblPassword);
```

```
txtfirst = new JTextField();
```

```
txtfirst.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtfirst.setBounds(159, 115, 127, 20);
```

```
panel.add(txtfirst);
```

```
txtfirst.setColumns(10);
```

```
txtfather = new JTextField();
```

```
txtfather.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtfather.setColumns(10);  
txtfather.setBounds(159, 149, 127, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtgrand.setColumns(10);  
txtgrand.setBounds(159, 177, 127, 20);  
panel.add(txtgrand);
```

```
txtfam = new JTextField();  
txtfam.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtfam.setColumns(10);  
txtfam.setBounds(159, 211, 127, 20);  
panel.add(txtfam);
```

```
JLabel lblCountry = new JLabel("Country :");  
lblCountry.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblCountry.setBounds(391, 214, 69, 23);  
panel.add(lblCountry);
```

```
JLabel lblCity = new JLabel("City :");  
lblCity.setFont(new Font("Tahoma", Font.PLAIN, 14));
```



```
lblCity.setBounds(391, 248, 69, 23);
```

```
panel.add(lblCity);
```

```
txtssn = new JTextField();
```

```
txtssn.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtssn.setColumns(10);
```

```
txtssn.setBounds(527, 115, 127, 20);
```

```
panel.add(txtssn);
```

```
txtemail = new JTextField();
```

```
txtemail.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtemail.setColumns(10);
```

```
txtemail.setBounds(527, 149, 127, 20);
```

```
panel.add(txtemail);
```

```
txtnumber = new JTextField();
```

```
txtnumber.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtnumber.setColumns(10);
```

```
txtnumber.setBounds(527, 183, 127, 20);
```

```
panel.add(txtnumber);
```

```
txtcountry = new JTextField();
```

```
txtcountry.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtcountry.setColumns(10);
```

```
txtcountry.setBounds(527, 217, 127, 20);  
panel.add(txtcountry);
```

```
txtcity = new JTextField();  
txtcity.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtcity.setColumns(10);  
txtcity.setBounds(527, 251, 127, 20);  
panel.add(txtcity);
```

```
txtuser = new JTextField();  
txtuser.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtuser.setColumns(10);  
txtuser.setBounds(101, 330, 127, 20);  
panel.add(txtuser);
```

```
txtpass = new JTextField();  
txtpass.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtpass.setColumns(10);  
txtpass.setBounds(101, 364, 127, 20);  
panel.add(txtpass);
```

```
JButton btnNewButton = new JButton("Submit");  
btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 18));  
btnNewButton.addActionListener(new ActionListener() {
```

```
public void actionPerformed(ActionEvent e)
{
    try {

        String username = "";

        username = txtuser.getText();

        File file = new File ("C:\\Users\\user\\eclipse-
workspace\\assignment\\src\\Text Files\\Users\\" + username + ".txt");

        if(file.exists())
        {
            JOptionPane.showMessageDialog(null, "User already
exists please choose another UserName");
        }
        else
        {
            String firstName = "";
            String fatherName = "";
            String grandName = "";
            String lastName = "";
            String password = "";
```

```
String email = "";  
String phone = "";  
String ssn = "";  
String country = "";  
String city = "";  
String nationality = "";
```

```
password = txtpass.getText();  
firstName = txtfirst.getText();  
fatherName = txtfather.getText();  
grandName = txtgrand.getText();  
lastName = txtfam.getText();  
ssn = txtssn.getText();  
email = txtemail.getText();  
phone = txtnumber.getText();  
country = txtcountry.getText();  
city = txtcity.getText();  
nationality = txtnation.getText();
```

```
FileWriter fileWriter = new FileWriter  
("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Users\\" + username + ".txt");
```

```
fileWriter.write(username + "\n");
```

```
fileWriter.write(password + "\n");  
fileWriter.write(firstName + "\n");  
fileWriter.write(fatherName + "\n");  
fileWriter.write(grandName + "\n");  
fileWriter.write(lastName + "\n");  
fileWriter.write(ssn + "\n");  
fileWriter.write(email + "\n");  
fileWriter.write(phone + "\n");  
fileWriter.write(country + "\n");  
fileWriter.write(city + "\n");  
fileWriter.write(nationality + "\n");
```

```
fileWriter.close();
```

```
JOptionPane.showMessageDialog(null, "User Created  
please go ahead and login with your new Username");
```

```
LoginPage loginPage = new LoginPage();  
setVisible (false);  
loginPage.setLocationRelativeTo(null);  
loginPage.setVisible(true);
```

```
}
```

```
        } catch (IOException e1) {  
            // TODO Auto-generated catch block  
            e1.printStackTrace();  
        }  
    }  
});  
btnNewButton.setBounds(493, 313, 133, 42);  
panel.add(btnNewButton);
```

```
JButton btnCancel = new JButton("Cancel");  
btnCancel.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e)  
    {  
        HomePage homePage = new HomePage();  
        setVisible (false);  
        homePage.setLocationRelativeTo(null);  
        homePage.setVisible(true);  
    }  
});
```

```
JButton btnClearAll = new JButton("Clear all");  
btnClearAll.addActionListener(new ActionListener() {
```

```

        public void actionPerformed(ActionEvent e)
        {
            txtfirst.setText("");
            txtfather.setText("");
            txtgrand.setText("");
            txtfam.setText("");
            txtuser.setText("");
            txtpass.setText("");
            txtssn.setText("");
            txtemail.setText("");
            txtnumber.setText("");
            txtcountry.setText("");
            txtcity.setText("");
        }
    });

    btnClearAll.setFont(new Font("Tahoma", Font.PLAIN, 18));
    btnClearAll.setBounds(493, 361, 133, 42);
    panel.add(btnClearAll);

    btnCancel.setFont(new Font("Tahoma", Font.PLAIN, 18));
    btnCancel.setBounds(493, 414, 133, 42);
    panel.add(btnCancel);

    JLabel lblNationality = new JLabel("Nationality :");
    lblNationality.setFont(new Font("Tahoma", Font.PLAIN, 14));

```

```
        lblNationality.setBounds(10, 242, 139, 23);

        panel.add(lblNationality);


        txtnation = new JTextField();

        txtnation.setFont(new Font("Tahoma", Font.PLAIN, 14));

        txtnation.setColumns(10);

        txtnation.setBounds(159, 245, 127, 20);

        panel.add(txtnation);

    }

}
```

## Main Page

The following is the source for the MainMenuPage

```
package assignmentFinal;


import java.awt.BorderLayout;

import java.awt.EventQueue;


import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.border.BevelBorder;

import java.awt.Color;

import javax.swing.JLabel;

import java.awt.Font;

import javax.swing.JButton;
```



```
import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;


public class MainPage extends JFrame {

    private JPanel contentPane;


    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    MainPage frame = new MainPage();
                    frame.setLocationRelativeTo(null);
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }
}
```

```

/**
 * Create the frame.
 */

public MainPage() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);


    JPanel panel = new JPanel();

    panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,
null, null));

    panel.setBounds(10, 11, 756, 474);

    contentPane.add(panel);

    panel.setLayout(null);


    JLabel lblWelcome = new JLabel("Welcome");

    lblWelcome.setFont(new Font("Tahoma", Font.PLAIN, 24));

    lblWelcome.setBounds(10, 21, 110, 25);

    panel.add(lblWelcome);


    JButton btnset = new JButton("Account Settings");

    btnset.addActionListener(new ActionListener() {

```

```

        public void actionPerformed(ActionEvent e)
        {
            AccountPage account = new AccountPage ();
            setVisible(false);
            account.setLocationRelativeTo(null);
            account.setVisible(true);
        }
    });

    btnset.setFont(new Font("Tahoma", Font.PLAIN, 15));
    btnset.setBounds(599, 18, 147, 39);
    panel.add(btnset);

    JButton btnNewButton = new JButton("Passport Renewals");
    btnNewButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e)
        {
            PassPortRenewal passport = new PassPortRenewal();
            setVisible(false);
            passport.setLocationRelativeTo(null);
            passport.setVisible(true);
        }
    });

    btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 14));
    btnNewButton.setBounds(54, 295, 164, 48);

```

```
panel.add(btnNewButton);
```

```
JButton btnVisas = new JButton("Visas");
```

```
btnVisas.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        VisaMenu visa = new VisaMenu();
```

```
        setVisible(false);
```

```
        visa.setLocationRelativeTo(null);
```

```
        visa.setVisible(true);
```

```
    }
```

```
});
```

```
btnVisas.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
btnVisas.setBounds(536, 295, 164, 48);
```

```
panel.add(btnVisas);
```

```
JButton btnIdRenewals = new JButton("ID Renewals");
```

```
btnIdRenewals.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        IDRenewal id = new IDRenewal();
```

```
        setVisible(false);
```

```
        id.setLocationRelativeTo(null);
```

```
        id.setVisible(true);
```

```

        }

    });

    btnIdRenewals.setFont(new Font("Tahoma", Font.PLAIN, 14));

    btnIdRenewals.setBounds(287, 295, 164, 48);

    panel.add(btnIdRenewals);


    JLabel lblNewLabel = new JLabel("Please Choose one of the options below :");

    lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 20));

    lblNewLabel.setBounds(197, 140, 379, 61);

    panel.add(lblNewLabel);

}

}

```

## Passport Renewals

The following is the source for the PassportRenewalPage

```

package assignmentFinal;

import java.awt.BorderLayout;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

```

```
import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;

import java.awt.Font;

import javax.swing.border.BevelBorder;

import java.awt.Color;

import javax.swing.JTextField;

import java.io.*;

public class PassPortRenewal extends JFrame {

    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtpassportnum;

    private JTextField txtdob;

    private JTextField txtpassportscan;

    private JTextField txtphotoscan;

    /**

     * Launch the application.

     */
```

```

public static void main(String[] args) {

    EventQueue.invokeLater(new Runnable() {

        public void run() {

            try {

                PassPortRenewal frame = new PassPortRenewal();

                frame.setVisible(true);

            } catch (Exception e) {

                e.printStackTrace();

            }

        }

    });

}

```

```

/**

```

```

 * Create the frame.

```

```

 */

```

```

public PassPortRenewal() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);

}

```

```
JPanel panel = new JPanel();

panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,
null, null));

panel.setBounds(10, 11, 756, 474);

contentPane.add(panel);

panel.setLayout(null);
```

```
JButton btnBack = new JButton("Back");

btnBack.setFont(new Font("Tahoma", Font.PLAIN, 15));

btnBack.setBounds(10, 421, 149, 42);

panel.add(btnBack);

btnBack.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        MainPage main = new MainPage();

        setVisible(false);

        main.setLocationRelativeTo(null);

        main.setVisible(true);

    }

});
```

```
JLabel label = new JLabel("Passport Renewals :");

label.setFont(new Font("Tahoma", Font.PLAIN, 24));

label.setBounds(10, 11, 216, 29);

panel.add(label);
```



```
JButton btnSubmit = new JButton("Submit");

btnSubmit.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        try {

            String username = "";

            String firstName = "";

            String fatherName = "";

            String grandName = "";

            String lastName = "";

            String ssn = "";

            String passportnum = "";

            String dateofbirth = "";

            String passportscan = "";

            String photoscan = "";


            firstName = txtfirst.getText();

            fatherName = txtfather.getText();

            grandName = txtgrand.getText();

            lastName = txtfam.getText();

            ssn = txtssn.getText();

            passportnum = txtpassportnum.getText();
```

```
dateofbirth = txtdob.getText();  
username = LoginPage.txtUser.getText();  
passportscan = txtpassportscan.getText();  
photoscan = txtphotoscan.getText();
```

```
FileWriter fileWriter = new FileWriter ("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\Passport_Renewals\\" + username + ".txt");
```

```
fileWriter.write(username + "\n");  
fileWriter.write(firstName + "\n");  
fileWriter.write(fatherName + "\n");  
fileWriter.write(grandName + "\n");  
fileWriter.write(lastName + "\n");  
fileWriter.write(ssn + "\n");  
fileWriter.write(passportnum + "\n");  
fileWriter.write(dateofbirth + "\n");  
fileWriter.write(passportscan + "\n");  
fileWriter.write(photoscan + "\n");
```

```
fileWriter.close();
```

```
JOptionPane.showMessageDialog(null, "Your request has been  
sent");
```

```
        } catch (IOException e1) {

            // TODO Auto-generated catch block

            e1.printStackTrace();

        }

    }

});

btnSubmit.setFont(new Font("Tahoma", Font.PLAIN, 15));

btnSubmit.setBounds(597, 421, 149, 42);

panel.add(btnSubmit);


JLabel lblFirstName = new JLabel("First Name :");

lblFirstName.setFont(new Font("Tahoma", Font.PLAIN, 14));

lblFirstName.setBounds(10, 91, 89, 23);

panel.add(lblFirstName);


JLabel lblFathersName = new JLabel("Father's Name :");

lblFathersName.setFont(new Font("Tahoma", Font.PLAIN, 14));

lblFathersName.setBounds(10, 125, 109, 23);

panel.add(lblFathersName);


JLabel lblGrandfathersName = new JLabel("GrandFather's Name :");

lblGrandfathersName.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblGrandfathersName.setBounds(10, 159, 149, 23);  
panel.add(lblGrandfathersName);
```

```
JLabel lblLastName = new JLabel("Last Name :");  
lblLastName.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblLastName.setBounds(10, 193, 89, 23);  
panel.add(lblLastName);
```

```
txtfirst = new JTextField();  
txtfirst.setBounds(170, 94, 149, 20);  
panel.add(txtfirst);  
txtfirst.setColumns(10);
```

```
txtfather = new JTextField();  
txtfather.setColumns(10);  
txtfather.setBounds(170, 128, 149, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setColumns(10);  
txtgrand.setBounds(169, 162, 150, 20);  
panel.add(txtgrand);
```

```
txtfam = new JTextField();
```

```
txtfam.setColumns(10);  
txtfam.setBounds(170, 196, 149, 20);  
panel.add(txtfam);
```

```
JLabel lblSsn = new JLabel("SSN :");  
lblSsn.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblSsn.setBounds(10, 227, 89, 23);  
panel.add(lblSsn);
```

```
txtssn = new JTextField();  
txtssn.setColumns(10);  
txtssn.setBounds(170, 230, 149, 20);  
panel.add(txtssn);
```

```
JLabel lblPassportNumber = new JLabel("Passport number : ");  
lblPassportNumber.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblPassportNumber.setBounds(10, 261, 118, 23);  
panel.add(lblPassportNumber);
```

```
txtpassportnum = new JTextField();  
txtpassportnum.setColumns(10);  
txtpassportnum.setBounds(170, 261, 149, 20);  
panel.add(txtpassportnum);
```

```
JLabel lblDateofbirth = new JLabel("Date of Birth :");  
lblDateofbirth.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblDateofbirth.setBounds(10, 295, 118, 23);  
panel.add(lblDateofbirth);
```

```
txtdob = new JTextField();  
txtdob.setColumns(10);  
txtdob.setBounds(170, 298, 149, 20);  
panel.add(txtdob);
```

```
JLabel lblPassportScangoogle = new JLabel("Passport Scan (Google Drive  
Link)");
```

```
lblPassportScangoogle.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblPassportScangoogle.setBounds(473, 97, 227, 17);  
panel.add(lblPassportScangoogle);
```

```
txtpassportscan = new JTextField();  
txtpassportscan.setBounds(483, 128, 180, 88);  
panel.add(txtpassportscan);  
txtpassportscan.setColumns(10);
```

```
JLabel lblPhotoScangoogle = new JLabel("Photo Scan (Google Drive Link)");  
lblPhotoScangoogle.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblPhotoScangoogle.setBounds(473, 230, 196, 17);  
panel.add(lblPhotoScangoogle);
```

```
        txtphotoscan = new JTextField();

        txtphotoscan.setColumns(10);

        txtphotoscan.setBounds(483, 264, 180, 88);

        panel.add(txtphotoscan);

    }
}
```

## ID Renewals

The following is the source for the IDRenewalPage

```
package assignmentFinal;

import java.awt.BorderLayout;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.io.FileWriter;
import java.io.IOException;
import java.awt.event.ActionEvent;
import java.awt.Font;
```

```
import javax.swing.JTextField;

import javax.swing.border.BevelBorder;

import java.awt.Color;


public class IDRenewal extends JFrame {


    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtidnum;

    private JTextField txtdob;

    private JTextField txtidscan;

    private JTextField txtphotoscan;


    /**
     * Launch the application.
     */

    public static void main(String[] args) {

        EventQueue.invokeLater(new Runnable() {

            public void run() {

                try {
```



```

        IDRenewal frame = new IDRenewal();

        frame.setVisible(true);

    } catch (Exception e) {

        e.printStackTrace();

    }

}

});

}

/**
 * Create the frame.
 */

public IDRenewal() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);

    JPanel panel = new JPanel();

    panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,
null, null));

    panel.setBounds(10, 11, 756, 474);

    contentPane.add(panel);

```

```
panel.setLayout(null);
```

```
JButton button = new JButton("Back");
```

```
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e)  
    {  
        MainPage main = new MainPage ();  
        setVisible(false);  
        main.setLocationRelativeTo(null);  
        main.setVisible(true);  
    }  
});
```

```
button.setFont(new Font("Tahoma", Font.PLAIN, 15));
```

```
button.setBounds(10, 421, 149, 42);
```

```
panel.add(button);
```

```
JLabel lblIdRenewals = new JLabel("ID Renewals :");
```

```
lblIdRenewals.setFont(new Font("Tahoma", Font.PLAIN, 24));
```

```
lblIdRenewals.setBounds(10, 11, 216, 29);
```

```
panel.add(lblIdRenewals);
```

```
JButton button_1 = new JButton("Submit");
```

```
button_1.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e)
```

```
{  
  
    try {  
  
        String username = "";  
        String firstName = "";  
        String fatherName = "";  
        String grandName = "";  
        String lastName = "";  
        String ssn = "";  
        String idnum = "";  
        String dateofbirth = "";  
        String idscan = "";  
        String photoscan = "";  
  
        firstName = txtfirst.getText();  
        fatherName = txtfather.getText();  
        grandName = txtgrand.getText();  
        lastName = txtfam.getText();  
        ssn = txtssn.getText();  
        idnum = txtidnum.getText();  
        dateofbirth = txtdob.getText();  
        username = LoginPage.txtUser.getText();  
        idscan = txtidscan.getText();  
        photoscan = txtphotoscan.getText();  
    }  
}
```

```
        FileWriter fileWriter = new FileWriter ("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\ID_Renewals\\" + username + ".txt");
```

```
        fileWriter.write(username + "\n");  
        fileWriter.write(firstName + "\n");  
        fileWriter.write(fatherName + "\n");  
        fileWriter.write(grandName + "\n");  
        fileWriter.write(lastName + "\n");  
        fileWriter.write(ssn + "\n");  
        fileWriter.write(idnum + "\n");  
        fileWriter.write(dateofbirth + "\n");  
        fileWriter.write(idscan + "\n");  
        fileWriter.write(photoscan + "\n");
```

```
        fileWriter.close();
```

```
        JOptionPane.showMessageDialog(null, "Your request has been  
sent");
```

```
    } catch (IOException e1) {  
        // TODO Auto-generated catch block  
        e1.printStackTrace();
```

```
        }  
    }  
});  
button_1.setFont(new Font("Tahoma", Font.PLAIN, 15));  
button_1.setBounds(597, 421, 149, 42);  
panel.add(button_1);  
  
JLabel label_1 = new JLabel("First Name :");  
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_1.setBounds(10, 91, 89, 23);  
panel.add(label_1);  
  
JLabel label_2 = new JLabel("Father's Name :");  
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_2.setBounds(10, 125, 109, 23);  
panel.add(label_2);  
  
JLabel label_3 = new JLabel("GrandFather's Name :");  
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_3.setBounds(10, 159, 149, 23);  
panel.add(label_3);  
  
JLabel label_4 = new JLabel("Last Name :");  
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_4.setBounds(10, 193, 89, 23);  
panel.add(label_4);
```

```
txtfirst = new JTextField();  
txtfirst.setColumns(10);  
txtfirst.setBounds(170, 94, 149, 20);  
panel.add(txtfirst);
```

```
txtfather = new JTextField();  
txtfather.setColumns(10);  
txtfather.setBounds(170, 128, 149, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setColumns(10);  
txtgrand.setBounds(169, 162, 150, 20);  
panel.add(txtgrand);
```

```
txtfam = new JTextField();  
txtfam.setColumns(10);  
txtfam.setBounds(170, 196, 149, 20);  
panel.add(txtfam);
```

```
JLabel label_5 = new JLabel("SSN :");
```

```
label_5.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_5.setBounds(10, 227, 89, 23);  
panel.add(label_5);
```

```
txtssn = new JTextField();  
txtssn.setColumns(10);  
txtssn.setBounds(170, 230, 149, 20);  
panel.add(txtssn);
```

```
JLabel lblIdNumber = new JLabel("ID number :");  
lblIdNumber.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblIdNumber.setBounds(10, 261, 118, 23);  
panel.add(lblIdNumber);
```

```
txtidnum = new JTextField();  
txtidnum.setColumns(10);  
txtidnum.setBounds(170, 264, 149, 20);  
panel.add(txtidnum);
```

```
JLabel lblDateOfBirth = new JLabel("Date of Birth :");  
lblDateOfBirth.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblDateOfBirth.setBounds(10, 295, 118, 23);  
panel.add(lblDateOfBirth);
```

```
txtdob = new JTextField();  
txtdob.setColumns(10);  
txtdob.setBounds(170, 298, 149, 20);  
panel.add(txtdob);
```

```
JLabel lblIdScangoogle = new JLabel("ID Scan (Google Drive Link)");  
lblIdScangoogle.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblIdScangoogle.setBounds(458, 94, 168, 17);  
panel.add(lblIdScangoogle);
```

```
txtidscan = new JTextField();  
txtidscan.setColumns(10);  
txtidscan.setBounds(446, 128, 180, 88);  
panel.add(txtidscan);
```

```
JLabel label_6 = new JLabel("Photo Scan (Google Drive Link)");  
label_6.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_6.setBounds(436, 230, 196, 17);  
panel.add(label_6);
```

```
txtphotoscan = new JTextField();  
txtphotoscan.setColumns(10);  
txtphotoscan.setBounds(446, 264, 180, 88);  
panel.add(txtphotoscan);
```



```
    }  
}
```

## Account Settings

The following is the source for the AccountSettingPage

```
package assignmentFinal;
```

```
import java.awt.BorderLayout;
```

```
import java.awt.EventQueue;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JPanel;
```

```
import javax.swing.border.EmptyBorder;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import java.awt.Font;
```

```
import javax.swing.JTextField;
```

```
import javax.swing.JButton;
```

```
import java.awt.event.ActionListener;
```

```
import java.io.File;
```

```
import java.io.FileNotFoundException;
```

```
import java.io.FileWriter;
```

```
import java.io.IOException;
```

```
import java.util.Scanner;
```

```
import java.awt.event.ActionEvent;
```

```

public class AccountPage extends JFrame {

    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtemail;

    private JTextField txtnumber;

    private JTextField txtcountry;

    private JTextField txtcity;

    private JTextField txtuser;

    private JTextField txtpass;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    AccountPage frame = new AccountPage();

```

```

        frame.setVisible(true);

    } catch (Exception e) {

        e.printStackTrace();

    }

}

});

}

/**
 * Create the frame.
 */

public AccountPage() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);


    JPanel panel = new JPanel();

    panel.setBounds(10, 11, 756, 474);

    contentPane.add(panel);

    panel.setLayout(null);

```

```
JLabel label = new JLabel("First Name :");  
label.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label.setBounds(10, 112, 81, 23);  
panel.add(label);
```

```
txtfirst = new JTextField();  
txtfirst.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtfirst.setColumns(10);  
txtfirst.setBounds(159, 115, 127, 20);  
panel.add(txtfirst);
```

```
JLabel label_1 = new JLabel("Father's Name :");  
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_1.setBounds(10, 140, 101, 23);  
panel.add(label_1);
```

```
txtfather = new JTextField();  
txtfather.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtfather.setColumns(10);  
txtfather.setBounds(159, 149, 127, 20);  
panel.add(txtfather);
```

```
JLabel label_2 = new JLabel("Grandfather's Name :");  
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_2.setBounds(10, 174, 139, 23);
```

```
panel.add(label_2);
```

```
txtgrand = new JTextField();
```

```
txtgrand.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtgrand.setColumns(10);
```

```
txtgrand.setBounds(159, 177, 127, 20);
```

```
panel.add(txtgrand);
```

```
JLabel label_3 = new JLabel("Family Name :");
```

```
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_3.setBounds(10, 208, 139, 23);
```

```
panel.add(label_3);
```

```
txtfam = new JTextField();
```

```
txtfam.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtfam.setColumns(10);
```

```
txtfam.setBounds(159, 211, 127, 20);
```

```
panel.add(txtfam);
```

```
JLabel label_4 = new JLabel("SSN :");
```

```
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_4.setBounds(391, 112, 81, 23);
```

```
panel.add(label_4);
```

```
JLabel label_5 = new JLabel("Email :");  
label_5.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_5.setBounds(391, 146, 81, 23);  
panel.add(label_5);
```

```
JLabel label_6 = new JLabel("Phone number :");  
label_6.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_6.setBounds(391, 180, 110, 23);  
panel.add(label_6);
```

```
JLabel label_7 = new JLabel("Country :");  
label_7.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_7.setBounds(391, 214, 69, 23);  
panel.add(label_7);
```

```
JLabel label_8 = new JLabel("City :");  
label_8.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_8.setBounds(391, 248, 69, 23);  
panel.add(label_8);
```

```
txtssn = new JTextField();  
txtssn.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtssn.setColumns(10);
```

```
txtssn.setBounds(527, 115, 127, 20);
```

```
panel.add(txtssn);
```

```
txtemail = new JTextField();
```

```
txtemail.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtemail.setColumns(10);
```

```
txtemail.setBounds(527, 149, 127, 20);
```

```
panel.add(txtemail);
```

```
txtnumber = new JTextField();
```

```
txtnumber.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtnumber.setColumns(10);
```

```
txtnumber.setBounds(527, 183, 127, 20);
```

```
panel.add(txtnumber);
```

```
txtcountry = new JTextField();
```

```
txtcountry.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtcountry.setColumns(10);
```

```
txtcountry.setBounds(527, 217, 127, 20);
```

```
panel.add(txtcountry);
```

```
txtcity = new JTextField();
```

```
txtcity.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
txtcity.setColumns(10);
```

```
txtcity.setBounds(527, 251, 127, 20);  
panel.add(txtcity);
```

```
JLabel label_9 = new JLabel("Username :");  
label_9.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_9.setBounds(10, 327, 81, 23);  
panel.add(label_9);
```

```
JLabel label_10 = new JLabel("Password :");  
label_10.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_10.setBounds(10, 361, 81, 23);  
panel.add(label_10);
```

```
txtuser = new JTextField();  
txtuser.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtuser.setColumns(10);  
txtuser.setBounds(159, 328, 127, 20);  
panel.add(txtuser);
```

```
txtpass = new JTextField();  
txtpass.setFont(new Font("Tahoma", Font.PLAIN, 14));  
txtpass.setColumns(10);  
txtpass.setBounds(159, 362, 127, 20);  
panel.add(txtpass);
```



```
JLabel label_11 = new JLabel("Please fill all of the boxes below");  
label_11.setFont(new Font("Tahoma", Font.PLAIN, 24));  
label_11.setBounds(10, 11, 395, 42);  
panel.add(label_11);
```

```
JButton button = new JButton("Submit");  
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e) {  
        try {  
  
            String userFirst = "";  
            String firstName = "";  
            String fatherName = "";  
            String grandName = "";  
            String lastName = "";  
            String username = "";  
            String password = "";  
            String email = "";  
            String phone = "";  
            String ssn = "";  
            String country = "";  
            String city = "";
```

```
username = txtuser.getText();  
password = txtpass.getText();  
firstName = txtfirst.getText();  
fatherName = txtfather.getText();  
grandName = txtgrand.getText();  
lastName = txtfam.getText();  
ssn = txtssn.getText();  
email = txtemail.getText();  
phone = txtnumber.getText();  
country = txtcountry.getText();  
city = txtcity.getText();
```

```
File file = new File("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\Users\\" + username + ".txt");
```

```
userFirst = LoginPage.txtUser.getText();
```

```
if (file.exists() && username != userFirst)  
{  
    JOptionPane.showMessageDialog(null, "Username  
Already exists please try again");  
}  
  
else  
{
```

```
File newFile = new File("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\Users\\" + userFirst + ".txt");
```

```
newFile.delete();
```

```
FileWriter fileWriter = new FileWriter ("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\Users\\" + username + ".txt");
```

```
fileWriter.write(username + "\\n");
```

```
fileWriter.write(password + "\\n");
```

```
fileWriter.write(firstName + "\\n");
```

```
fileWriter.write(fatherName + "\\n");
```

```
fileWriter.write(grandName + "\\n");
```

```
fileWriter.write(lastName + "\\n");
```

```
fileWriter.write(ssn + "\\n");
```

```
fileWriter.write(email + "\\n");
```

```
fileWriter.write(phone + "\\n");
```

```
fileWriter.write(country + "\\n");
```

```
fileWriter.write(city + "\\n");
```

```
fileWriter.close();
```

```
JOptionPane.showMessageDialog(null, "Thank you, your  
credintials have been changed");
```

```

    }

    } catch (IOException e1) {

        // TODO Auto-generated catch block
        e1.printStackTrace();
    }
}

});

button.setFont(new Font("Tahoma", Font.PLAIN, 18));

button.setBounds(594, 350, 133, 42);

panel.add(button);


JButton button_1 = new JButton("Cancel");

button_1.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        MainPage main = new MainPage();

        setVisible(false);

        main.setLocationRelativeTo(null);

        main.setVisible(true);

    }

});

button_1.setFont(new Font("Tahoma", Font.PLAIN, 18));

```

```
button_1.setBounds(594, 407, 133, 42);
```

```
panel.add(button_1);
```

```
JButton btnGetInformation = new JButton("Get Information");
```

```
btnGetInformation.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        try {
```

```
            String userFirst = LoginPage.txtUser.getText();
```

```
            File getFile = new File("C:\\Users\\user\\eclipse-  
workspace\\assignment\\src\\Text Files\\Users\\" + userFirst + ".txt");
```

```
            Scanner scan = new Scanner (getFile);
```

```
            String username = scan.nextLine();
```

```
            String password = scan.nextLine();
```

```
            String firstName = scan.nextLine();
```

```
            String fatherName = scan.nextLine();
```

```
            String grandName = scan.nextLine();
```

```
            String lastName = scan.nextLine();
```

```
            String ssn = scan.nextLine();
```

```
            String email = scan.nextLine();
```

```
            String phone = scan.nextLine();
```

```
            String country = scan.nextLine();
```

```
String city = scan.nextLine();
```

```
txtuser.setText(username);
```

```
txtpass.setText(password);
```

```
txtfirst.setText(firstName);
```

```
txtfather.setText(fatherName);
```

```
txtgrand.setText(grandName);
```

```
txtfam.setText(lastName);
```

```
txtssn.setText(ssn);
```

```
txtemail.setText(email);
```

```
txtnumber.setText(phone);
```

```
txtcountry.setText(country);
```

```
txtcity.setText(city);
```

```
scan.close();
```

```
} catch (FileNotFoundException e1) {
```

```
    // TODO Auto-generated catch block
```

```
    e1.printStackTrace();
```

```
}
```

```

        }

    });

    btnGetInformation.setFont(new Font("Tahoma", Font.PLAIN, 14));

    btnGetInformation.setBounds(451, 408, 133, 42);

    panel.add(btnGetInformation);

}
}

```

## Visa Menu

The following is the source for the VisaMenuPage

```

package assignmentFinal;

import java.awt.BorderLayout;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.Font;

public class VisaMenu extends JFrame {

```

```

private JPanel contentPane;

/**
 * Launch the application.
 */
public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                VisaMenu frame = new VisaMenu();
                frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}

/**
 * Create the frame.
 */
public VisaMenu() {
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 792, 535);
}

```



```

contentPane = new JPanel();

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

contentPane.setLayout(null);


JLabel lblVisa = new JLabel("Choose the Type of Visa that you are applying for
:");

lblVisa.setFont(new Font("Tahoma", Font.PLAIN, 20));

lblVisa.setBounds(135, 88, 531, 63);

contentPane.add(lblVisa);


JButton button = new JButton("Back");

button.setFont(new Font("Tahoma", Font.PLAIN, 14));

button.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        MainPage main = new MainPage();

        setVisible(false);

        main.setLocationRelativeTo(null);

        main.setVisible(true);

    }

});

button.setBounds(10, 441, 133, 44);

contentPane.add(button);

```

```
JButton btnWork = new JButton("Work");

btnWork.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        WorkVisas work = new WorkVisas ();

        setVisible(false);

        work.setLocationRelativeTo(null);

        work.setVisible(true);

    }

});

btnWork.setFont(new Font("Tahoma", Font.PLAIN, 14));

btnWork.setBounds(108, 235, 133, 44);

contentPane.add(btnWork);
```

```
JButton btnTourism = new JButton("Tourism");

btnTourism.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        VisitVisas visit = new VisitVisas ();

        setVisible(false);

        visit.setLocationRelativeTo(null);

        visit.setVisible(true);

    }

});
```

```
btnTourism.setFont(new Font("Tahoma", Font.PLAIN, 14));  
btnTourism.setBounds(303, 235, 133, 44);  
contentPane.add(btnTourism);
```

```
JButton btnFamilyfriends = new JButton("Family/Friends");  
btnFamilyfriends.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)  
    {
```

```
        FamilyVisas fam = new FamilyVisas ();  
        setVisible(false);  
        fam.setLocationRelativeTo(null);  
        fam.setVisible(true);
```

```
    }
```

```
});
```

```
btnFamilyfriends.setFont(new Font("Tahoma", Font.PLAIN, 14));  
btnFamilyfriends.setBounds(501, 235, 133, 44);  
contentPane.add(btnFamilyfriends);
```

```
}
```

```
}
```

## Work Visas

The following is the source for the WorkVisasPage

```
package assignmentFinal;

import java.awt.BorderLayout;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.border.BevelBorder;
import java.awt.Color;
import javax.swing.JLabel;
import javax.swing.JOptionPane;

import java.awt.Font;
import javax.swing.JTextField;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.io.FileWriter;
import java.io.IOException;
import java.awt.event.ActionEvent;

public class WorkVisas extends JFrame {
```

```
private JPanel contentPane;

private JTextField txtfirst;

private JTextField txtfather;

private JTextField txtgrand;

private JTextField txtfam;

private JTextField txtssn;

private JTextField txtdob;

private JTextField txtpassportnum;

private JTextField txtnumeroE;

private JTextField txtduration;

private JLabel lblWorkVisas;

private JLabel label_7;

private JTextField txtpassportscan;

private JLabel label_8;

private JTextField txtphotoscan;

private JLabel lblBusinessLettergoogle;

private JTextField txtletter;

/**
 * Launch the application.
 */

public static void main(String[] args) {

    EventQueue.invokeLater(new Runnable() {

        public void run() {
```

```

        try {

            WorkVisas frame = new WorkVisas();

            frame.setVisible(true);

        } catch (Exception e) {

            e.printStackTrace();

        }

    }

});

}

/**
 * Create the frame.
 */

public WorkVisas() {

    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    setBounds(100, 100, 792, 535);

    contentPane = new JPanel();

    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

    setContentPane(contentPane);

    contentPane.setLayout(null);


    JPanel panel = new JPanel();

    panel.setBorder(new BevelBorder(BevelBorder.LOWERED, Color.BLACK, null,
null, null));

    panel.setBounds(10, 11, 756, 474);

```

```
contentPane.add(panel);
```

```
panel.setLayout(null);
```

```
JLabel label = new JLabel("First Name :");
```

```
label.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label.setBounds(24, 72, 89, 23);
```

```
panel.add(label);
```

```
txtfirst = new JTextField();
```

```
txtfirst.setColumns(10);
```

```
txtfirst.setBounds(184, 75, 149, 20);
```

```
panel.add(txtfirst);
```

```
JLabel label_1 = new JLabel("Father's Name :");
```

```
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_1.setBounds(24, 106, 109, 23);
```

```
panel.add(label_1);
```

```
JLabel label_2 = new JLabel("GrandFather's Name :");
```

```
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_2.setBounds(24, 140, 149, 23);
```

```
panel.add(label_2);
```

```
txtfather = new JTextField();
```

```
txtfather.setColumns(10);  
txtfather.setBounds(184, 109, 149, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setColumns(10);  
txtgrand.setBounds(183, 143, 150, 20);  
panel.add(txtgrand);
```

```
JLabel label_3 = new JLabel("Last Name :");  
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_3.setBounds(24, 174, 89, 23);  
panel.add(label_3);
```

```
txtfam = new JTextField();  
txtfam.setColumns(10);  
txtfam.setBounds(184, 177, 149, 20);  
panel.add(txtfam);
```

```
JLabel label_4 = new JLabel("SSN :");  
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_4.setBounds(24, 208, 89, 23);  
panel.add(label_4);
```



```
txtssn = new JTextField();  
txtssn.setColumns(10);  
txtssn.setBounds(184, 211, 149, 20);  
panel.add(txtssn);
```

```
JLabel label_5 = new JLabel("Date of Birth");  
label_5.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_5.setBounds(24, 242, 118, 23);  
panel.add(label_5);
```

```
txtdob = new JTextField();  
txtdob.setColumns(10);  
txtdob.setBounds(184, 245, 149, 20);  
panel.add(txtdob);
```

```
JLabel label_6 = new JLabel("Passport number : ");  
label_6.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_6.setBounds(24, 276, 118, 23);  
panel.add(label_6);
```

```
txtpassportnum = new JTextField();  
txtpassportnum.setColumns(10);  
txtpassportnum.setBounds(184, 276, 149, 20);  
panel.add(txtpassportnum);
```

```
JLabel lblHowManyEntries = new JLabel("How many entries :");  
lblHowManyEntries.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblHowManyEntries.setBounds(24, 310, 149, 23);  
panel.add(lblHowManyEntries);
```

```
txtnumeroE = new JTextField();  
txtnumeroE.setColumns(10);  
txtnumeroE.setBounds(184, 310, 149, 20);  
panel.add(txtnumeroE);
```

```
JLabel lblVisaDuration = new JLabel("Visa Duration :");  
lblVisaDuration.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblVisaDuration.setBounds(24, 344, 118, 23);  
panel.add(lblVisaDuration);
```

```
txtduration = new JTextField();  
txtduration.setColumns(10);  
txtduration.setBounds(184, 344, 149, 20);  
panel.add(txtduration);
```

```
lblWorkVisas = new JLabel("Work Visas :");  
lblWorkVisas.setFont(new Font("Tahoma", Font.PLAIN, 24));  
lblWorkVisas.setBounds(10, 23, 162, 29);
```

```
panel.add(lblWorkVisas);
```

```
label_7 = new JLabel("Passport Scan (Google Drive Link)");
```

```
label_7.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_7.setBounds(446, 55, 227, 17);
```

```
panel.add(label_7);
```

```
txtpassportscan = new JTextField();
```

```
txtpassportscan.setColumns(10);
```

```
txtpassportscan.setBounds(456, 86, 180, 88);
```

```
panel.add(txtpassportscan);
```

```
label_8 = new JLabel("Photo Scan (Google Drive Link)");
```

```
label_8.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_8.setBounds(446, 188, 216, 17);
```

```
panel.add(label_8);
```

```
txtphotoscan = new JTextField();
```

```
txtphotoscan.setColumns(10);
```

```
txtphotoscan.setBounds(456, 222, 180, 88);
```

```
panel.add(txtphotoscan);
```

```
lblBusinessLettergoogle = new JLabel("Business Letter (Google Drive Link)");
```

```
lblBusinessLettergoogle.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblBusinessLettergoogle.setBounds(442, 334, 220, 17);  
panel.add(lblBusinessLettergoogle);
```

```
txtletter = new JTextField();  
txtletter.setColumns(10);  
txtletter.setBounds(456, 362, 180, 88);  
panel.add(txtletter);
```

```
JButton button = new JButton("Submit");  
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e)  
    {  
        try {  
  
            String username = "";  
            String firstName = "";  
            String fatherName = "";  
            String grandName = "";  
            String lastName = "";  
            String ssn = "";  
            String passportnum = "";  
            String dateofbirth = "";  
            String passportscan = "";  
            String photoscan = "";
```

```
String bletter = "";
```

```
String numeroE = "";
```

```
String duration = "";
```

```
firstName = txtfirst.getText();
```

```
fatherName = txtfather.getText();
```

```
grandName = txtgrand.getText();
```

```
lastName = txtfam.getText();
```

```
ssn = txtssn.getText();
```

```
passportnum = txtpassportnum.getText();
```

```
dateofbirth = txtdob.getText();
```

```
username = LoginPage.txtUser.getText();
```

```
passportscan = txtpassportscan.getText();
```

```
photoscan = txtphotoscan.getText();
```

```
bletter = txtletter.getText();
```

```
numeroE = txtnumeroE.getText();
```

```
duration = txtduration.getText();
```

```
FileWriter fileWriter = new FileWriter  
("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Visas\\Work\\" + username +  
".txt");
```

```
fileWriter.write(username + "\n");
```

```
fileWriter.write(firstName + "\n");
```

```

        fileWriter.write(fatherName + "\n");
        fileWriter.write(grandName + "\n");
        fileWriter.write(lastName + "\n");
        fileWriter.write(ssn + "\n");
        fileWriter.write(passportnum + "\n");
        fileWriter.write(dateofbirth + "\n");
        fileWriter.write(numberoE + "\n");
        fileWriter.write(duration + "\n");
        fileWriter.write(passportscan + "\n");
        fileWriter.write(photoscan + "\n");
        fileWriter.write(bletter + "\n");

        fileWriter.close();

        JOptionPane.showMessageDialog(null, "Your request has
been sent");

    } catch (IOException e1) {

        // TODO Auto-generated catch block
        e1.printStackTrace();

    }

}

});

button.setFont(new Font("Tahoma", Font.PLAIN, 15));

```

```

        button.setBounds(10, 378, 149, 42);

        panel.add(button);

        JButton button_1 = new JButton("Back");

        button_1.addActionListener(new ActionListener() {

            public void actionPerformed(ActionEvent e)

            {

                VisaMenu visa = new VisaMenu();

                setVisible (false);

                visa.setLocationRelativeTo(null);

                visa.setVisible(true);

            }

        });

        button_1.setFont(new Font("Tahoma", Font.PLAIN, 15));

        button_1.setBounds(10, 428, 149, 42);

        panel.add(button_1);

    }

}

```

## Family Visas

The following is the source for the FamilyVisasPage

```
package assignmentFinal;
```

```
import java.awt.BorderLayout;
```

```
import java.awt.EventQueue;
```

```
import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import javax.swing.JOptionPane;


import java.awt.Font;

import javax.swing.JTextField;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.io.FileWriter;

import java.io.IOException;

import java.awt.event.ActionEvent;


public class FamilyVisas extends JFrame {

    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtdob;

    private JTextField txtpassportnum;
```



```
private JTextField txtnumeroE;

private JTextField txtduration;

private JTextField txtpassportscan;

private JTextField txtletter;


/**

 * Launch the application.

 */

public static void main(String[] args) {

    EventQueue.invokeLater(new Runnable() {

        public void run() {

            try {

                FamilyVisas frame = new FamilyVisas();

                frame.setVisible(true);

            } catch (Exception e) {

                e.printStackTrace();

            }

        }

    });

}


/**

 * Create the frame.

 */
```

```
public FamilyVisas() {  
  
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
  
    setBounds(100, 100, 792, 535);  
  
    contentPane = new JPanel();  
  
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));  
  
    setContentPane(contentPane);  
  
    contentPane.setLayout(null);  
  
  
    JPanel panel = new JPanel();  
  
    panel.setBounds(10, 11, 756, 474);  
  
    contentPane.add(panel);  
  
    panel.setLayout(null);  
  
  
  
    JLabel label = new JLabel("First Name :");  
  
    label.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
    label.setBounds(22, 60, 89, 23);  
  
    panel.add(label);  
  
  
  
  
    txtfirst = new JTextField();  
  
    txtfirst.setColumns(10);  
  
    txtfirst.setBounds(182, 63, 149, 20);  
  
    panel.add(txtfirst);  
  
  
  
  
    JLabel label_1 = new JLabel("Father's Name :");
```

```
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_1.setBounds(22, 94, 109, 23);  
panel.add(label_1);
```

```
JLabel label_2 = new JLabel("GrandFather's Name :");  
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_2.setBounds(22, 128, 149, 23);  
panel.add(label_2);
```

```
txtfather = new JTextField();  
txtfather.setColumns(10);  
txtfather.setBounds(182, 97, 149, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setColumns(10);  
txtgrand.setBounds(181, 131, 150, 20);  
panel.add(txtgrand);
```

```
JLabel label_3 = new JLabel("Last Name :");  
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_3.setBounds(22, 162, 89, 23);  
panel.add(label_3);
```

```
txtfam = new JTextField();  
txtfam.setColumns(10);  
txtfam.setBounds(182, 165, 149, 20);  
panel.add(txtfam);
```

```
JLabel label_4 = new JLabel("SSN :");  
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_4.setBounds(22, 196, 89, 23);  
panel.add(label_4);
```

```
txtssn = new JTextField();  
txtssn.setColumns(10);  
txtssn.setBounds(182, 199, 149, 20);  
panel.add(txtssn);
```

```
JLabel label_5 = new JLabel("Date of Birth");  
label_5.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_5.setBounds(22, 230, 118, 23);  
panel.add(label_5);
```

```
txtdob = new JTextField();  
txtdob.setColumns(10);  
txtdob.setBounds(182, 233, 149, 20);  
panel.add(txtdob);
```

```
JLabel label_6 = new JLabel("Passport number : ");  
label_6.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_6.setBounds(22, 264, 118, 23);  
panel.add(label_6);
```

```
txtpassportnum = new JTextField();  
txtpassportnum.setColumns(10);  
txtpassportnum.setBounds(182, 264, 149, 20);  
panel.add(txtpassportnum);
```

```
JLabel label_9 = new JLabel("How many entries :");  
label_9.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_9.setBounds(22, 298, 149, 23);  
panel.add(label_9);
```

```
txtnumeroE = new JTextField();  
txtnumeroE.setColumns(10);  
txtnumeroE.setBounds(182, 298, 149, 20);  
panel.add(txtnumeroE);
```

```
JLabel label_10 = new JLabel("Visa Duration :");  
label_10.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_10.setBounds(22, 332, 118, 23);
```

```
panel.add(label_10);
```

```
txtduration = new JTextField();
```

```
txtduration.setColumns(10);
```

```
txtduration.setBounds(182, 332, 149, 20);
```

```
panel.add(txtduration);
```

```
JLabel lblFriendsAndFamily = new JLabel("Friends and Family Visas :");
```

```
lblFriendsAndFamily.setFont(new Font("Tahoma", Font.PLAIN, 24));
```

```
lblFriendsAndFamily.setBounds(10, 11, 314, 29);
```

```
panel.add(lblFriendsAndFamily);
```

```
JLabel label_7 = new JLabel("Passport Scan (Google Drive Link)");
```

```
label_7.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_7.setBounds(488, 56, 227, 17);
```

```
panel.add(label_7);
```

```
txtpassportscan = new JTextField();
```

```
txtpassportscan.setColumns(10);
```

```
txtpassportscan.setBounds(498, 87, 180, 88);
```

```
panel.add(txtpassportscan);
```

```
JLabel label_8 = new JLabel("Photo Scan (Google Drive Link)");
```

```
label_8.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_8.setBounds(488, 189, 216, 17);
```

```
panel.add(label_8);
```

```
JTextField txtphotoscan = new JTextField();
```

```
txtphotoscan.setColumns(10);
```

```
txtphotoscan.setBounds(498, 223, 180, 88);
```

```
panel.add(txtphotoscan);
```

```
JLabel lblFamilyfriendLettergoogle = new JLabel("Family/Friend Letter (Google  
Drive Link)");
```

```
lblFamilyfriendLettergoogle.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
lblFamilyfriendLettergoogle.setBounds(470, 335, 257, 17);
```

```
panel.add(lblFamilyfriendLettergoogle);
```

```
txtrletter = new JTextField();
```

```
txtrletter.setColumns(10);
```

```
txtrletter.setBounds(498, 363, 180, 88);
```

```
panel.add(txtrletter);
```

```
JButton button = new JButton("Submit");
```

```
button.addActionListener(new ActionListener() {
```

```
    public void actionPerformed(ActionEvent e)
```

```
    {
```

```
        try {
```

```
String username = LoginPage.txtUser.getText();
```

```
String firstName = txtfirst.getText();
```

```
String fatherName = txtfather.getText();
```

```
String grandName = txtgrand.getText();
```

```
String lastName = txtfam.getText();
```

```
String ssn = txtssn.getText();
```

```
String passportnum = txtpassportnum.getText();
```

```
String dateofbirth = txtdob.getText();
```

```
String passportscan = txtpassportscan.getText();
```

```
String photoscan = txtphotoscan.getText();
```

```
String rletter = txtletter.getText();
```

```
String numeroE = txtnumeroE.getText();
```

```
String duration = txtduration.getText();
```

```
FileWriter fileWriter = new FileWriter  
("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Visas\\Family\\" + username +  
".txt");
```

```
fileWriter.write(username + "\n");
```

```
fileWriter.write(firstName + "\n");
```

```
fileWriter.write(fatherName + "\n");
```

```
fileWriter.write(grandName + "\n");
```

```
fileWriter.write(lastName + "\n");
```

```
fileWriter.write(ssn + "\n");
```

```
fileWriter.write(passportnum + "\n");
```



```
fileWriter.write(dateofbirth + "\n");  
fileWriter.write(numberoE + "\n");  
fileWriter.write(duration + "\n");  
fileWriter.write(passportscan + "\n");  
fileWriter.write(photoscan + "\n");  
fileWriter.write(rletter + "\n");  
  
fileWriter.close();  
  
JOptionPane.showMessageDialog(null, "Your request has  
been sent");
```

```
    } catch (IOException e1) {  
        // TODO Auto-generated catch block  
        e1.printStackTrace();  
    }  
}  
  
});  
  
button.setFont(new Font("Tahoma", Font.PLAIN, 15));  
button.setBounds(10, 371, 149, 42);  
panel.add(button);  
  
JButton button_1 = new JButton("Back");  
button_1.addActionListener(new ActionListener() {
```

```

        public void actionPerformed(ActionEvent e)
        {
            VisaMenu visa = new VisaMenu ();
            setVisible (false);
            visa.setLocationRelativeTo(null);
            visa.setVisible(true);
        }
    });
    button_1.setFont(new Font("Tahoma", Font.PLAIN, 15));
    button_1.setBounds(10, 421, 149, 42);
    panel.add(button_1);
}
}

```

## Visit Visas

The following is the source for the VisitationVisasPage

```

package assignmentFinal;

import java.awt.BorderLayout;
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;

```

```
import javax.swing.JOptionPane;

import java.awt.Font;

import javax.swing.JTextField;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.io.FileWriter;

import java.io.IOException;

import java.awt.event.ActionEvent;

public class VisitVisas extends JFrame {

    private JPanel contentPane;

    private JTextField txtfirst;

    private JTextField txtfather;

    private JTextField txtgrand;

    private JTextField txtfam;

    private JTextField txtssn;

    private JTextField txtdob;

    private JTextField txtpassportnum;

    private JTextField txtnum;

    private JTextField txtduration;

    private JLabel label_7;

    private JTextField txtpassportscan;
```

```

private JLabel label_8;

private JTextField txtphotoscan;

private JTextField txthotelscan;

private JLabel lblHotelReservationScan;

private JLabel lblVisitationVisas;

/**

* Launch the application.

*/

public static void main(String[] args) {

    EventQueue.invokeLater(new Runnable() {

        public void run() {

            try {

                VisitVisas frame = new VisitVisas();

                frame.setVisible(true);

            } catch (Exception e) {

                e.printStackTrace();

            }

        }

    });

}

/**

* Create the frame.

```

```
*/
```

```
public VisitVisas() {  
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
    setBounds(100, 100, 792, 535);  
    contentPane = new JPanel();  
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));  
    setContentPane(contentPane);  
    contentPane.setLayout(null);  
  
    JPanel panel = new JPanel();  
    panel.setBounds(10, 11, 756, 474);  
    contentPane.add(panel);  
    panel.setLayout(null);  
  
    JLabel label = new JLabel("First Name :");  
    label.setFont(new Font("Tahoma", Font.PLAIN, 14));  
    label.setBounds(20, 54, 89, 23);  
    panel.add(label);  
  
    txtfirst = new JTextField();  
    txtfirst.setColumns(10);  
    txtfirst.setBounds(180, 57, 149, 20);  
    panel.add(txtfirst);  
}
```

```
JLabel label_1 = new JLabel("Father's Name :");  
label_1.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_1.setBounds(20, 88, 109, 23);  
panel.add(label_1);
```

```
JLabel label_2 = new JLabel("GrandFather's Name :");  
label_2.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_2.setBounds(20, 122, 149, 23);  
panel.add(label_2);
```

```
txtfather = new JTextField();  
txtfather.setColumns(10);  
txtfather.setBounds(180, 91, 149, 20);  
panel.add(txtfather);
```

```
txtgrand = new JTextField();  
txtgrand.setColumns(10);  
txtgrand.setBounds(179, 125, 150, 20);  
panel.add(txtgrand);
```

```
JLabel label_3 = new JLabel("Last Name :");  
label_3.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_3.setBounds(20, 156, 89, 23);  
panel.add(label_3);
```

```
txtfam = new JTextField();  
  
txtfam.setColumns(10);  
  
txtfam.setBounds(180, 159, 149, 20);  
  
panel.add(txtfam);
```

```
JLabel label_4 = new JLabel("SSN :");  
  
label_4.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
label_4.setBounds(20, 190, 89, 23);  
  
panel.add(label_4);
```

```
txtssn = new JTextField();  
  
txtssn.setColumns(10);  
  
txtssn.setBounds(180, 193, 149, 20);  
  
panel.add(txtssn);
```

```
JLabel label_5 = new JLabel("Date of Birth");  
  
label_5.setFont(new Font("Tahoma", Font.PLAIN, 14));  
  
label_5.setBounds(20, 224, 118, 23);  
  
panel.add(label_5);
```

```
txtdob = new JTextField();  
  
txtdob.setColumns(10);  
  
txtdob.setBounds(180, 227, 149, 20);
```

```
panel.add(txtdob);
```

```
JLabel label_6 = new JLabel("Passport number : ");
```

```
label_6.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_6.setBounds(20, 258, 118, 23);
```

```
panel.add(label_6);
```

```
txtpassportnum = new JTextField();
```

```
txtpassportnum.setColumns(10);
```

```
txtpassportnum.setBounds(180, 258, 149, 20);
```

```
panel.add(txtpassportnum);
```

```
JLabel label_9 = new JLabel("How many entries :");
```

```
label_9.setFont(new Font("Tahoma", Font.PLAIN, 14));
```

```
label_9.setBounds(20, 292, 149, 23);
```

```
panel.add(label_9);
```

```
txtnum = new JTextField();
```

```
txtnum.setColumns(10);
```

```
txtnum.setBounds(180, 292, 149, 20);
```

```
panel.add(txtnum);
```

```
JLabel label_10 = new JLabel("Visa Duration :");
```

```
label_10.setFont(new Font("Tahoma", Font.PLAIN, 14));
```



```
label_10.setBounds(20, 326, 118, 23);  
panel.add(label_10);
```

```
txtduration = new JTextField();  
txtduration.setColumns(10);  
txtduration.setBounds(180, 326, 149, 20);  
panel.add(txtduration);
```

```
label_7 = new JLabel("Passport Scan (Google Drive Link)");  
label_7.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_7.setBounds(439, 54, 227, 17);  
panel.add(label_7);
```

```
txtpassportscan = new JTextField();  
txtpassportscan.setColumns(10);  
txtpassportscan.setBounds(449, 85, 180, 88);  
panel.add(txtpassportscan);
```

```
label_8 = new JLabel("Photo Scan (Google Drive Link)");  
label_8.setFont(new Font("Tahoma", Font.PLAIN, 14));  
label_8.setBounds(439, 187, 216, 17);  
panel.add(label_8);
```

```
txtphotoscan = new JTextField();
```

```
txtphotoscan.setColumns(10);  
txtphotoscan.setBounds(449, 221, 180, 88);  
panel.add(txtphotoscan);
```

```
txthotelscan = new JTextField();  
txthotelscan.setColumns(10);  
txthotelscan.setBounds(449, 361, 180, 88);  
panel.add(txthotelscan);
```

```
lblHotelReservationScan = new JLabel("Hotel Reservation Scan (Google Drive  
Link)");
```

```
lblHotelReservationScan.setFont(new Font("Tahoma", Font.PLAIN, 14));  
lblHotelReservationScan.setBounds(409, 329, 288, 17);  
panel.add(lblHotelReservationScan);
```

```
lblVisitationVisas = new JLabel("Visitation Visas :");  
lblVisitationVisas.setFont(new Font("Tahoma", Font.PLAIN, 24));  
lblVisitationVisas.setBounds(10, 11, 216, 29);  
panel.add(lblVisitationVisas);
```

```
JButton button = new JButton("Back");  
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent e)  
    {  
        VisaMenu visa = new VisaMenu();
```

```
        setVisible(false);

        visa.setLocationRelativeTo(null);

        visa.setVisible(true);

    }

});

button.setFont(new Font("Tahoma", Font.PLAIN, 15));

button.setBounds(0, 432, 149, 42);

panel.add(button);
```

```
JButton button_1 = new JButton("Submit");

button_1.addActionListener(new ActionListener() {

    public void actionPerformed(ActionEvent e)

    {

        try {
```

```
            String username = "";

            String firstName = "";

            String fatherName = "";

            String grandName = "";

            String lastName = "";

            String ssn = "";

            String passportnum = "";

            String dateofbirth = "";

            String passportscan = "";
```

```
String photoscan = "";
```

```
String hotelscan = "";
```

```
String numeroE = "";
```

```
String duration = "";
```

```
firstName = txtfirst.getText();
```

```
fatherName = txtfather.getText();
```

```
grandName = txtgrand.getText();
```

```
lastName = txtfam.getText();
```

```
ssn = txtssn.getText();
```

```
passportnum = txtpassportnum.getText();
```

```
dateofbirth = txtdob.getText();
```

```
username = LoginPage.txtUser.getText();
```

```
passportscan = txtpassportscan.getText();
```

```
photoscan = txtphotoscan.getText();
```

```
hotelscan = txthotelscan.getText();
```

```
numeroE = txtnum.getText();
```

```
duration = txtduration.getText();
```

```
FileWriter fileWriter = new FileWriter  
("C:\\Users\\user\\eclipse-workspace\\assignment\\src\\Text Files\\Visas\\Visit\\" + username +  
".txt");
```

```
fileWriter.write(username + "\n");
```

```

fileWriter.write(firstName + "\n");
fileWriter.write(fatherName + "\n");
fileWriter.write(grandName + "\n");
fileWriter.write(lastName + "\n");
fileWriter.write(ssn + "\n");
fileWriter.write(passportnum + "\n");
fileWriter.write(dateofbirth + "\n");
fileWriter.write(numberoE + "\n");
fileWriter.write(duration + "\n");
fileWriter.write(passportscan + "\n");
fileWriter.write(photoscan + "\n");
fileWriter.write(hotelscan + "\n");

fileWriter.close();

JOptionPane.showMessageDialog(null, "Your request has
been sent");

    } catch (IOException e1) {
        // TODO Auto-generated catch block
        e1.printStackTrace();
    }

}

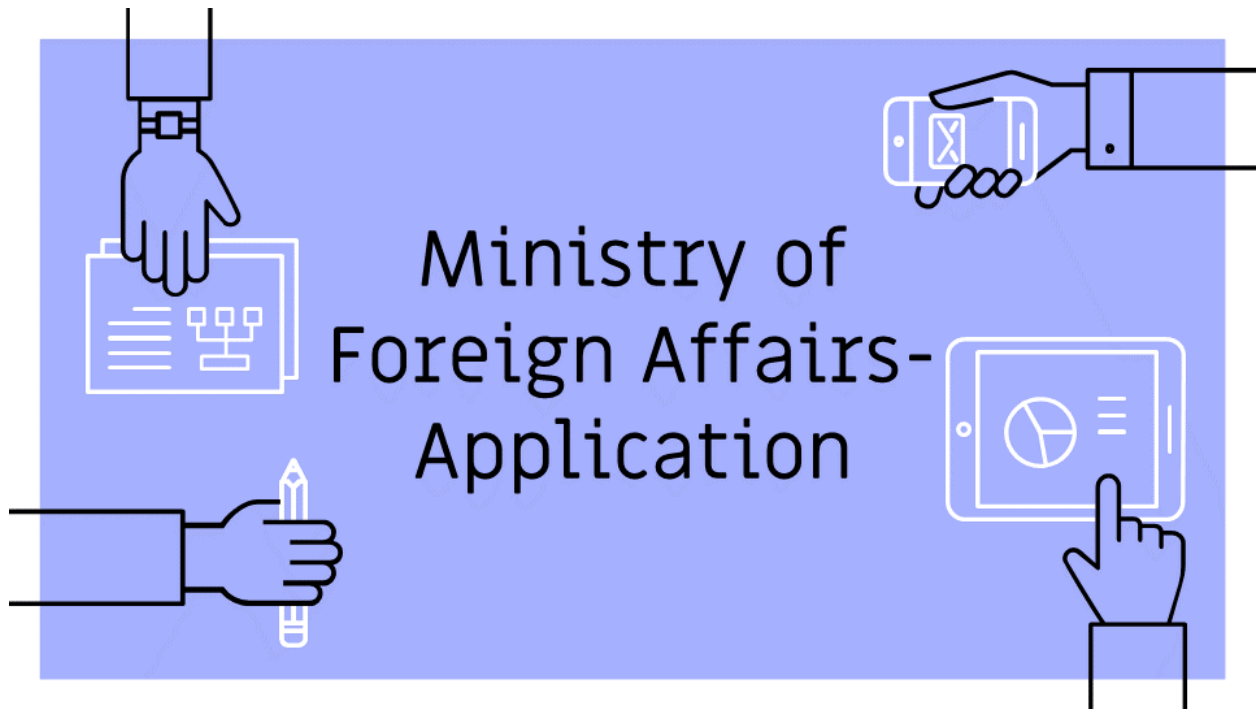
});

button_1.setFont(new Font("Tahoma", Font.PLAIN, 15));

```

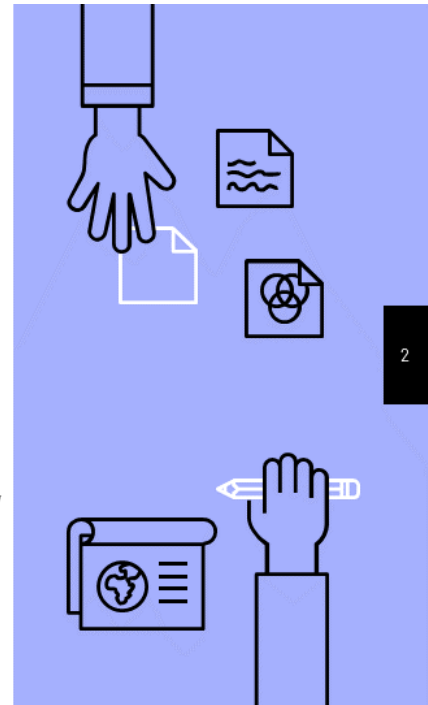
```
button_1.setBounds(0, 382, 149, 42);  
panel.add(button_1);  
}  
}
```

## Appendix (B: PowerPoint)

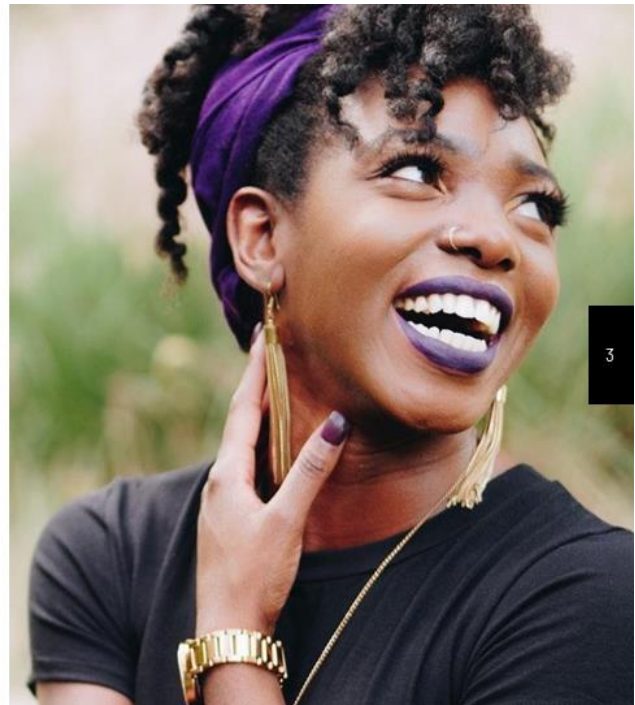


## Introduction

- ▶ The software development company based in Amman-Jordan that I work for as a software developer, has been awarded a project from an NGO(Non-Governmental Organization) that to help the government move faster towards their digital automation, and my company has been given multiple governmental ministries to choose from which are the Ministry of Health, Ministry of Finance, Ministry of Tourism, Ministry of Foreign affairs and finally the Ministry of Interior, and as the software developer I've been given upon, multiple of colleagues, and each one of us is required to come up with the application to solve it



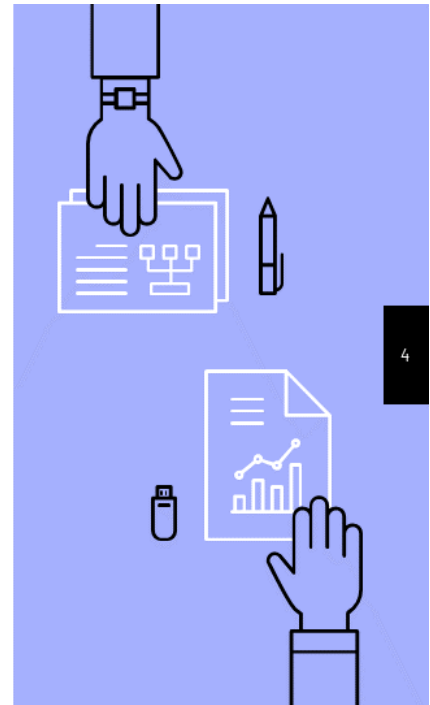
## Scenario



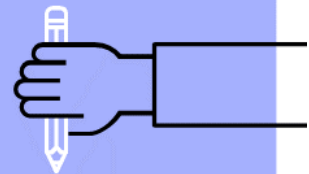
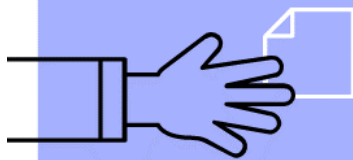
## Problem definition and Solution

- Here you have a list of items
- And some text
- But remember not to overload your slides with content

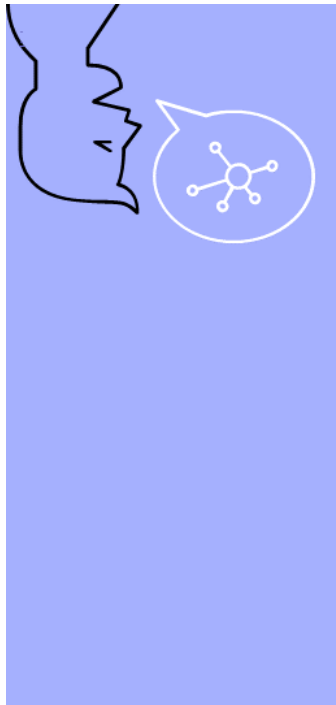
Your audience will listen to you or read the content, but won't do both.



## 1. Algorithm Definition







“

Algorithm Types:

1. Simple Recursive

Algorithms:

2. Backtracking

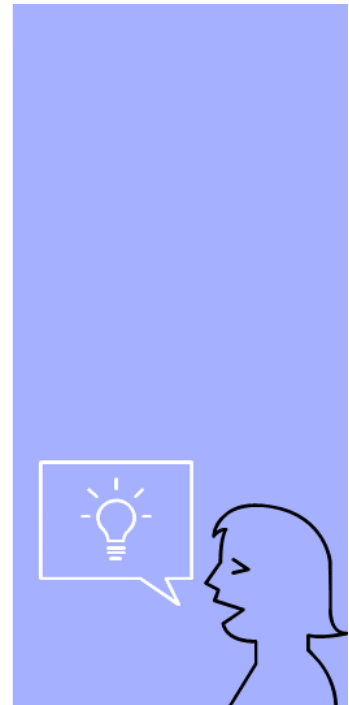
Algorithms:

3. Divide and Conquer

Algorithms:

4. Brute Force

Algorithms:



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# Steps from Code to Execution

Bring the attention  
of your audience  
over a key concept  
using icons or  
illustrations



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## Types of Paradigms

**Object Oriented Paradigm.**

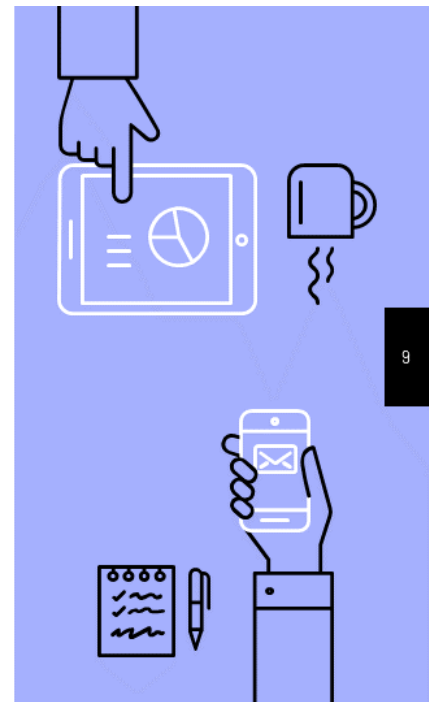
**Event Driven Paradigm**

**Procedural Paradigm**



## Problem Definition

- ▶ While seeing the services that the Ministry of Foreign Affairs offers the Jordanian population that's out of Jordan, it was found that whether there'd be a citizen that lives abroad that wants to renew their ID or Passport, or a foreigner applying for a visa to visit family, or work, or just to see Jordan the Ministry of Foreign Affairs plays the unnecessary middle man role between the people and the designated sector. As aforementioned above that their role as the middleman is unnecessary and considering the number of people that use this service, cutting out the Ministry of Foreign Affairs from their role as their middle man will serve a great step in automating the process of the government while also relieving the Ministry from its unimportant role.

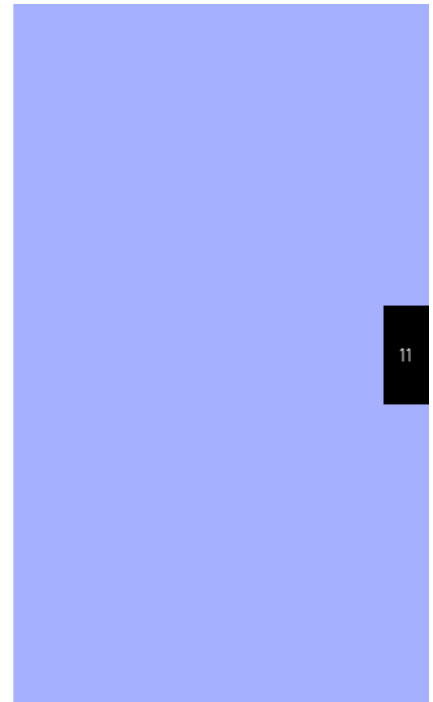


## Design Document



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## Wireframes



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Site Title

First name	<input type="text"/>	SSN	<input type="text"/>
father's Name	<input type="text"/>	Email	<input type="text"/>
Grand father name	<input type="text"/>	phone number	<input type="text"/>
family name	<input type="text"/>	country	<input type="text"/>
nationality	<input type="text"/>	city	<input type="text"/>

User name

password

Button

Button

Button

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## Mock-Ups

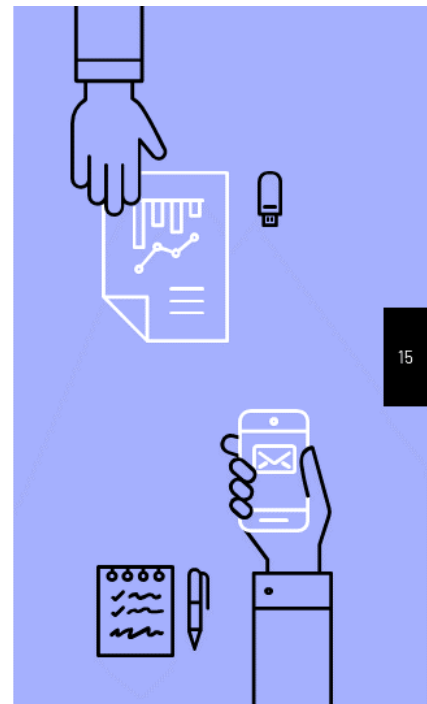


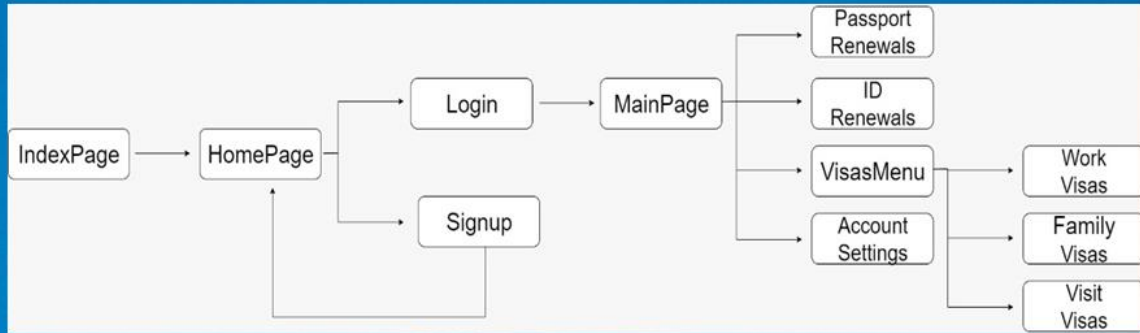
13

Please fill all of the boxes below

First Name :	<input type="text" value="Rami"/>	SSN :	<input type="text" value="18210036"/>
Father's Name :	<input type="text" value="Ahmed"/>	Email :	<input type="text" value="yarbakir@gmail.com"/>
Grandfather's Name :	<input type="text" value="Rami"/>	Phone number :	<input type="text" value="0777545878"/>
Family Name :	<input type="text" value="Al-Najjar"/>	Country :	<input type="text" value="Jordan"/>
		City :	<input type="text" value="Amman"/>
Username :	<input type="text" value="root"/>		
Password :	<input type="text" value="admin"/>		

View Map





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Thank You for listening

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