

Configuration Manual

MSc Research Project
Cybersecurity

Umesh Salunkhe

Student ID: X19215169

School of Computing
National College of
Ireland

Supervisor: Imran Khan

**National College of Ireland Project
Submission Sheet School of
Computing**



Student Name:	Umesh Popat Salunkhe
Student ID:	X19215169
Programme:	CyberSecurity
Year:	2021
Module:	MSc Research Project
Supervisor:	Imran Khan
Submission Due Date:	16/12/2021
Project Title:	Configuration Manual
Word Count:	424
Page Count:	1

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature:	
Date:	16 th October 2021

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST:

Attach a completed copy of this sheet to each project (including multiple copies).	Q
Attach a module submission receipt of the online project submission, to each project (including multiple copies).	Q
and in case a project is lost or mislaid, it is not sufficient to keep a copy on computer.	Q

Assignments that are submitted to the Programme Coordinator office must be placed into the assignment box located outside the office.

Office Use Only	
Signature:	
Date:	
Penalty Applied (if applicable):	

1. Introduction:

The configuration manual is divided into subsections. It will elaborate on the detailed implementation, specification, and working flow of the research project. It will also show what framework libraries are used for implementation. This manual will be helpful for the new researcher to rebuild this user authentication technique in future.

2. Hardware specification:

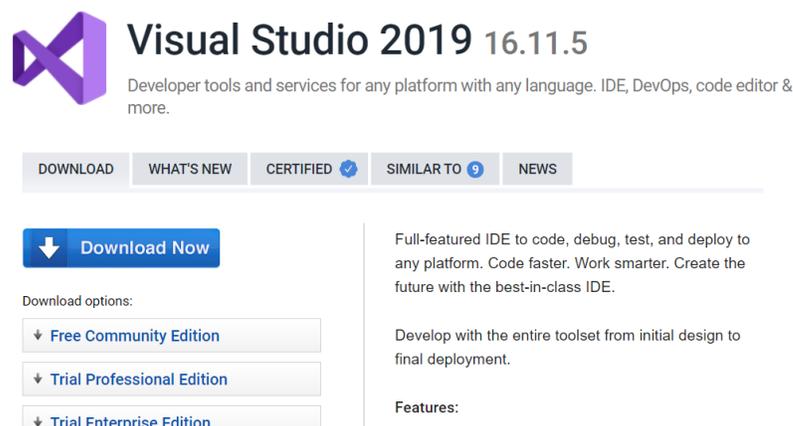
- a. System name: DESKTOP-ROVFI
- b. Processor: Intel(R) Core(TM) i5 8250U CPU @ 1.60GHz 1.80GHz
- c. RAM: 16 GB
- d. Operating System: Windows 10
- e. System: 64-bit operating system, x64-based processor

3. Libraries Used:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;
using System.IO;
using System.Text.RegularExpressions;
using System.Drawing.Imaging;
using System.Configuration;
```

Figure 1: Libraries

4. Environment Installation:



Visual Studio 2019 16.11.5
Developer tools and services for any platform with any language. IDE, DevOps, code editor & more.

DOWNLOAD WHAT'S NEW CERTIFIED SIMILAR TO NEWS

[Download Now](#)

Download options:

- [Free Community Edition](#)
- [Trial Professional Edition](#)
- [Trial Enterprise Edition](#)

Full-featured IDE to code, debug, test, and deploy to any platform. Code faster. Work smarter. Create the future with the best-in-class IDE.

Develop with the entire toolset from initial design to final deployment.

Features:

Figure 2: Visual Studio Installation.

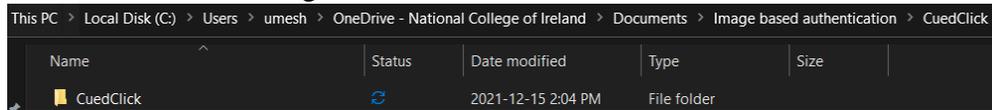


Figure 3: Path

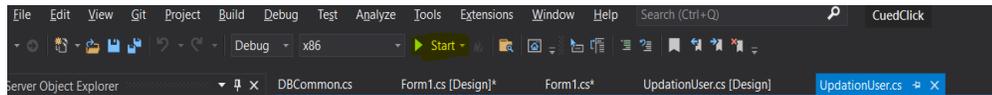


Figure 4: Run the Code

5. Registration Phase:

- User has to enter the username, name, Phone no, and email address.
- Once it done user has to click on register button, if the user has given details are in required format.

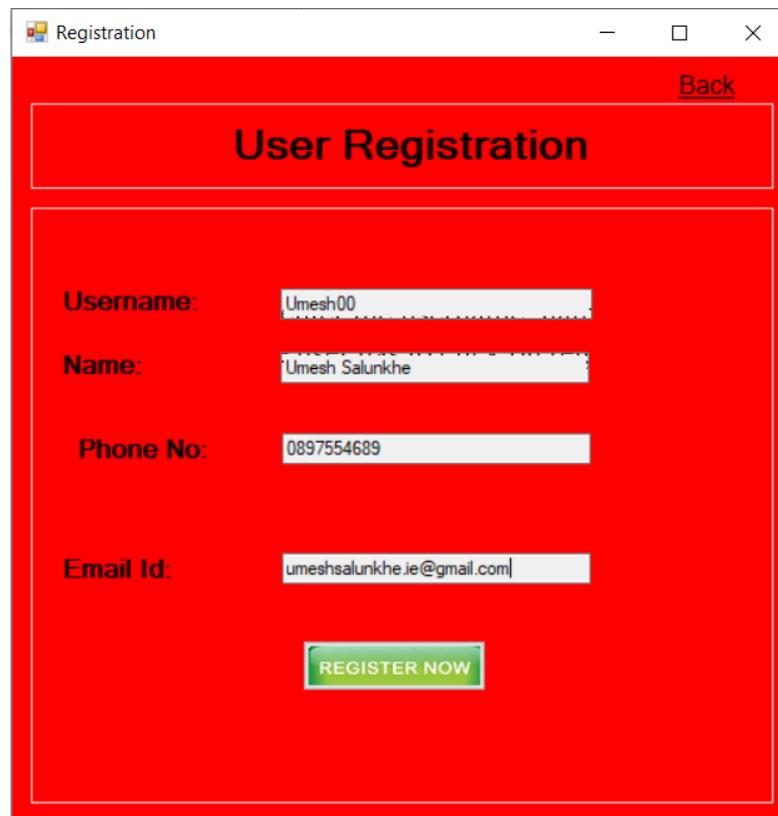


Figure 5: Registration Window

c. After click on register button, the image selection option will appear



Figure 6: Option for Image selection

d. The user has to select the option, first the user select, the user has to select from the own system. The window will pop-up with options like Browse, Refresh, Next. Browse button is used to load images from the system and refresh button is used to shuffle the location of click. Next button is used for the save the selected point.

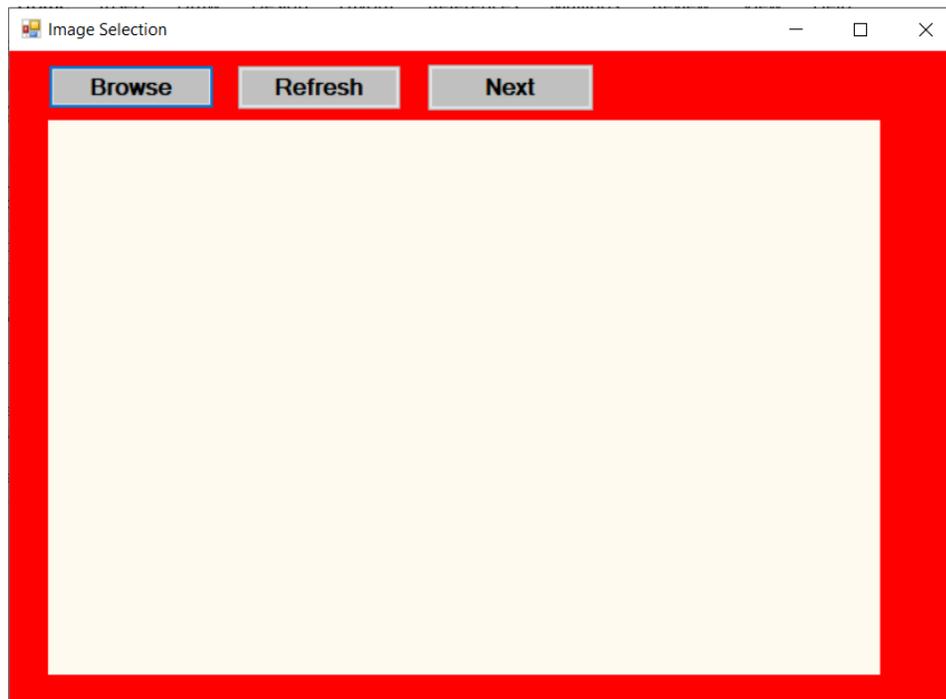


Figure 7: Image browsing window

- e. First image registration, red color box represents the cued click alteration.

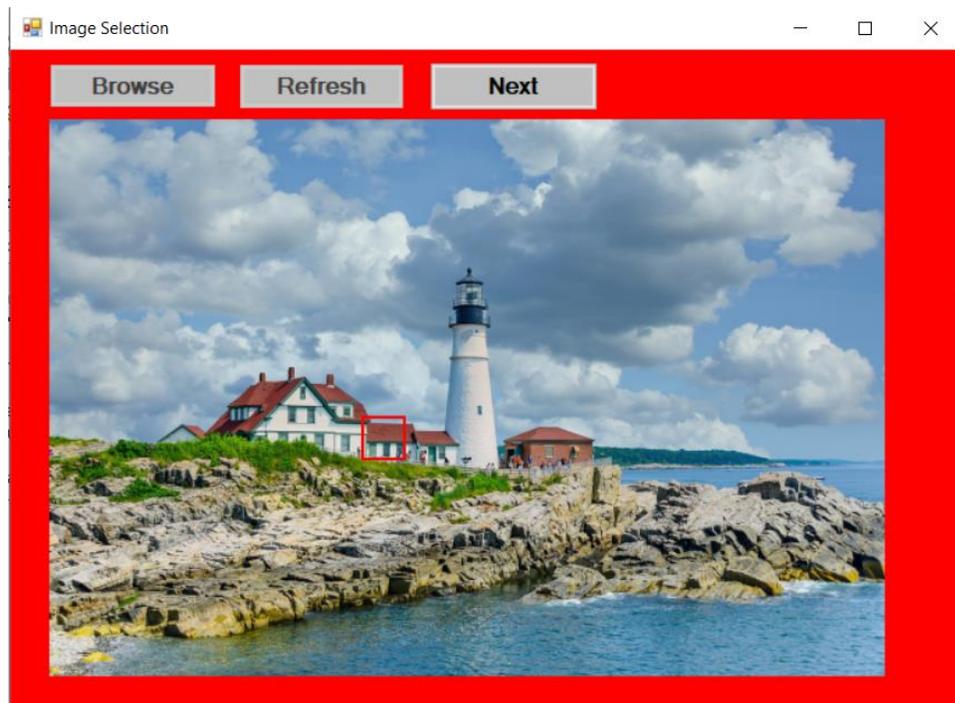


Figure 8: First Image

- f. After the click point is confirmed, the small window will occur as shown in below figure.

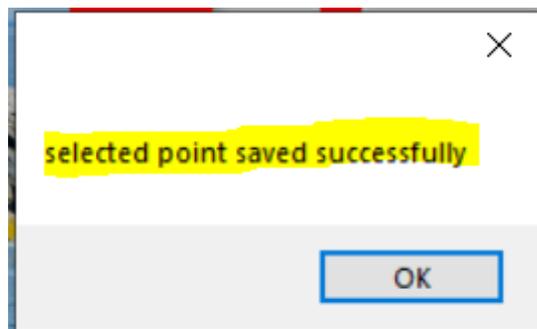


Figure 9: Pop Window for Save click point

g. The same process will happen with the second and the third image.

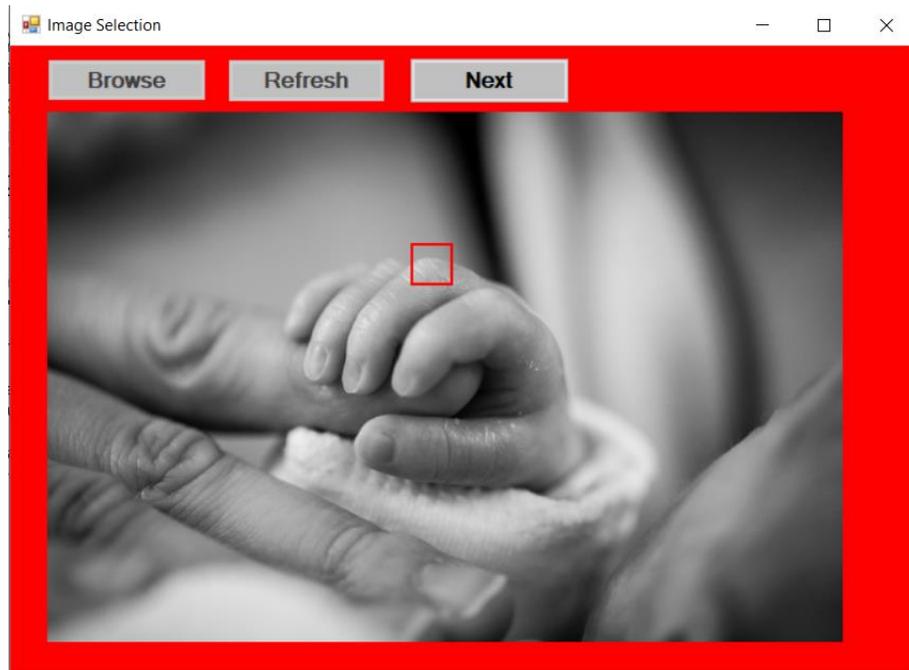


Figure 9: Second Image Registration

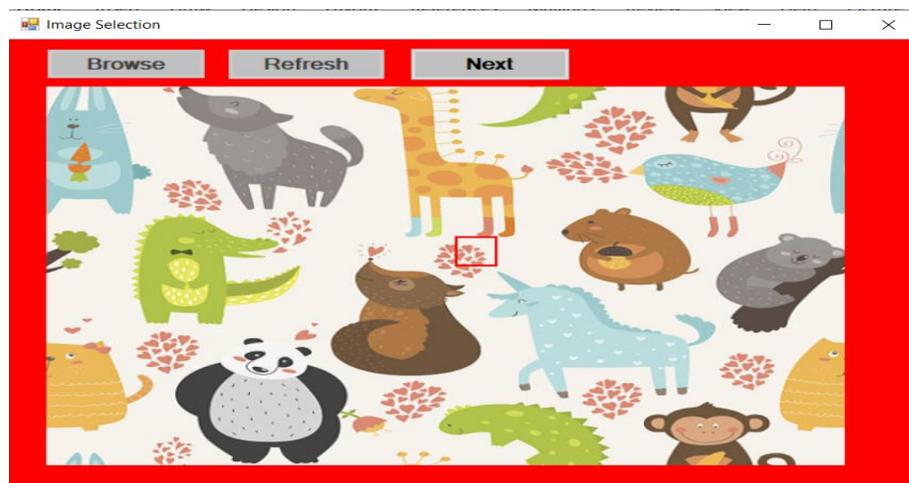


Figure 10: Third Image Registration

6. Login Phase:

- a. The user must enter the username and click on Login button.

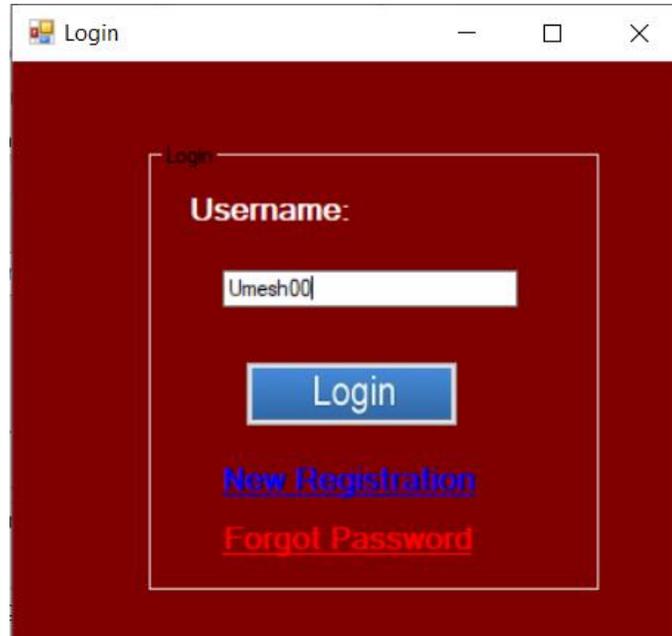


Figure 11: Login Window

- b. After entering the username the user will receive the Binary OTP as shown in figure.

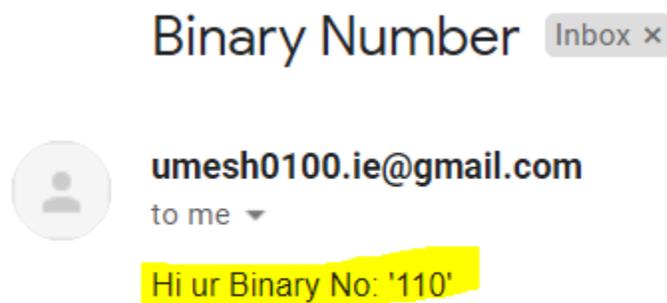


Figure 12: Binary OTP

- c. According to the received OTP, the user must click on the registered images. When the digit is 1, the user must do right click and when the digit is zero, the user has to do wrong click on the image. The OTP is “110” that means (**Right_click-Right_click-Wrong_click**)

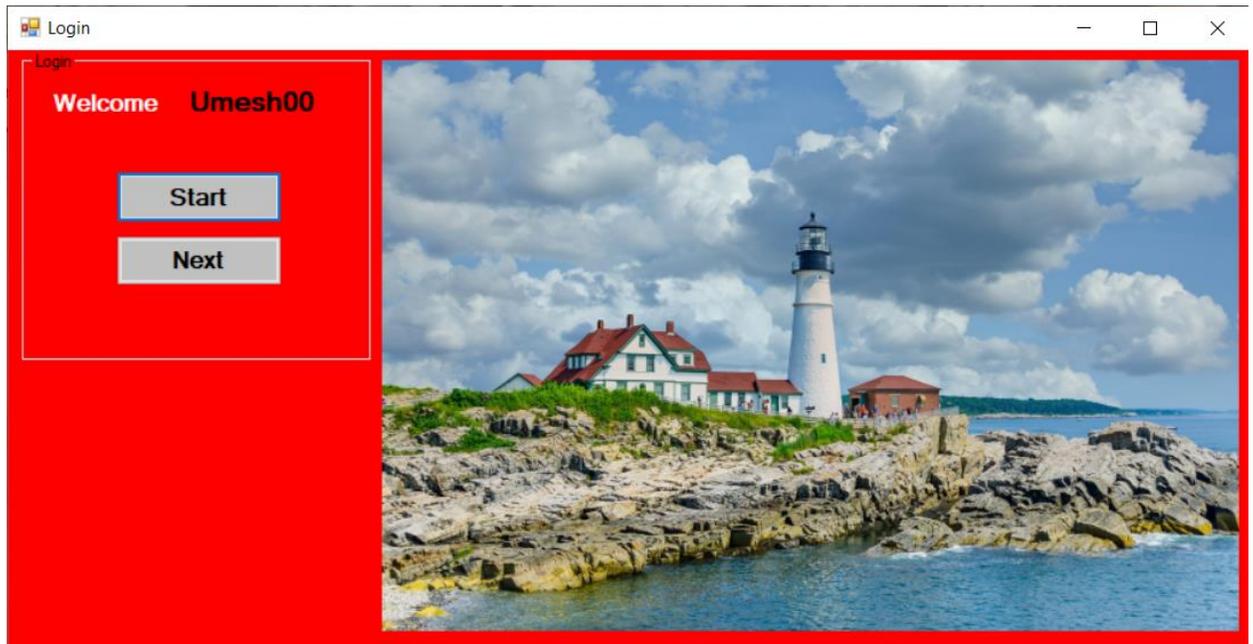


Figure 13: First image Click point verification

- d. The following correct images are occurred because the click has been done according to the binary OTP.



Figure 14: Second image Click point verification

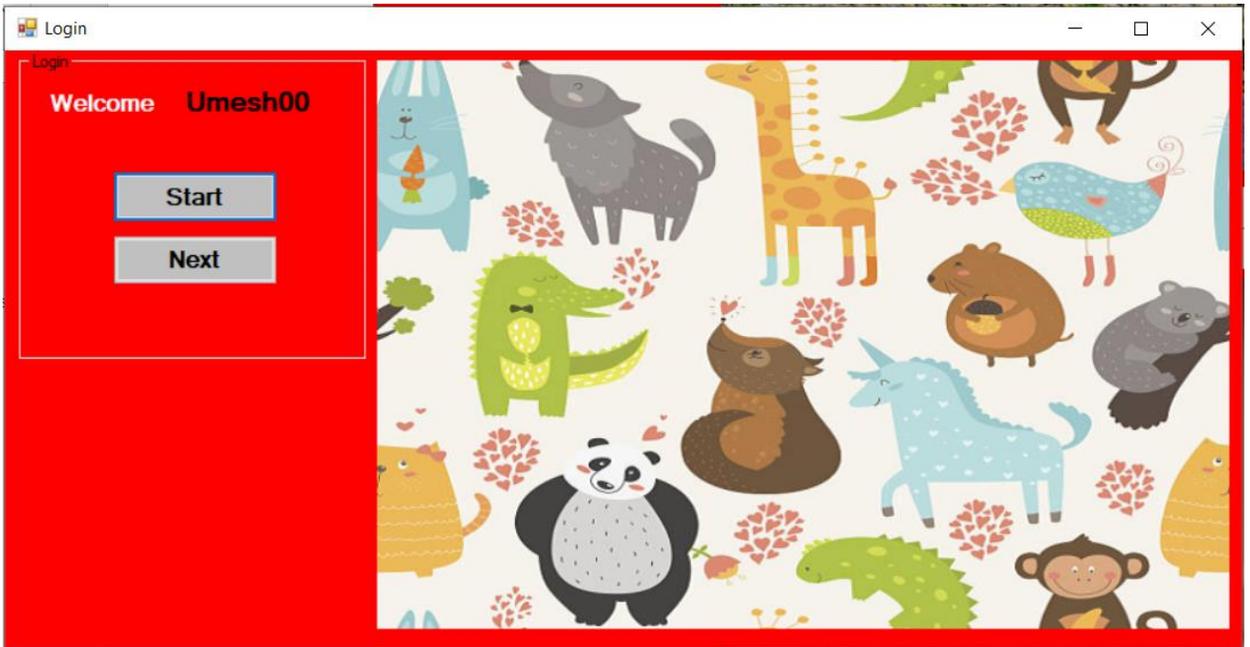


Figure 15: Third image Click point verification

- e. At last, the user performed the clicking activity as per the OTP. Authentication gets successful.

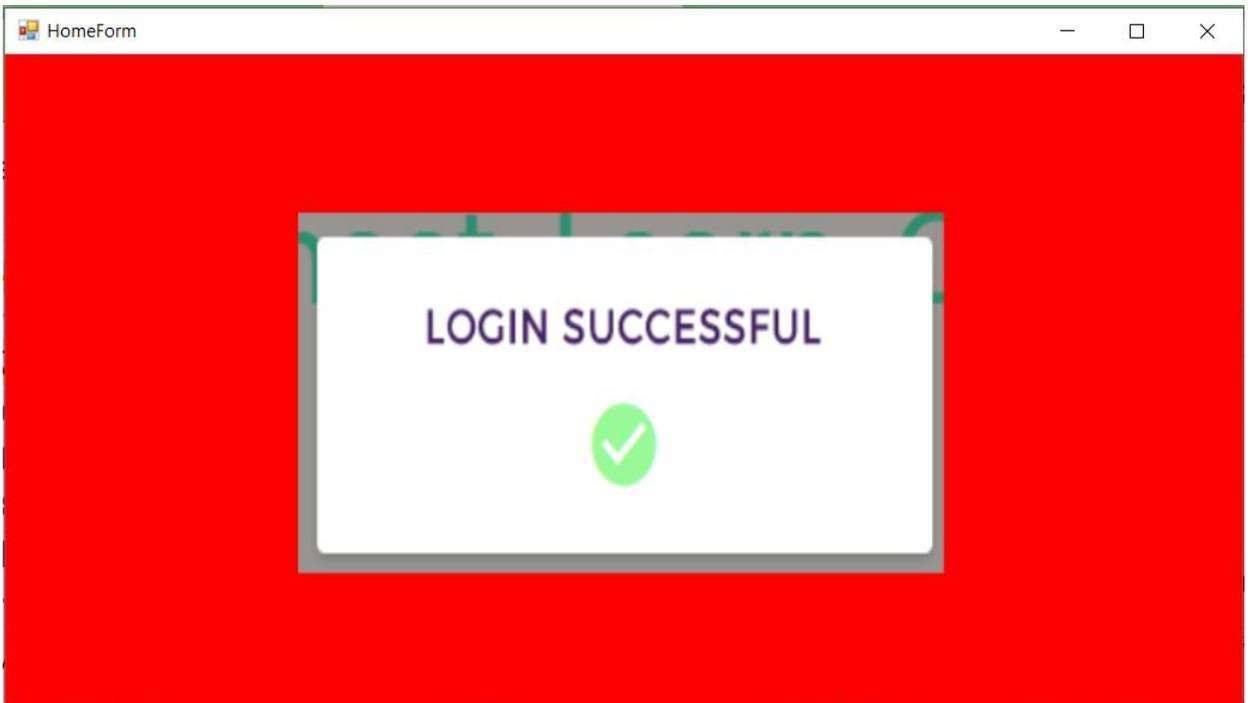


Figure 16: Login Window

- f. Suppose the user click on wrong position or click the region not according to OTP the random image will occur.



Figure 17: Window Occur after wrong click

7. Forgot Password:

- a. When user want to change the click points or user unable to remember the click point. There is a option called "Forgot Password".



Figure 18: Forgot password Window

- b. When the user click on forgot password, user will received the five digits integer number for authorization.

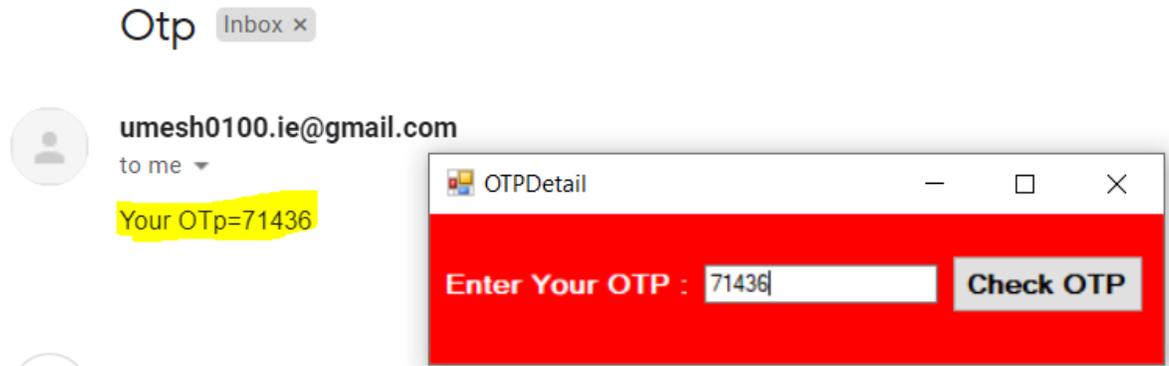


Figure 19: Integer OTP for forgot password.

- c. After the authorization, the new window will appear and user has to fill data data, generate new clicks and images. In short, in this user has to performe sames steps as registration stage.

The image shows a window titled 'UpdationUser'. On the left side, there is a 'New Registration' form with the following fields: 'Username:' (Umesh), 'Name:' (Umesh P Salunkhe), 'Phone Number:' (0897554689), 'Email Id:' (umeshsalukhe.ie@gmail.com), and 'Password:' (represented by dots). A 'Register' button is located at the bottom of this form. To the right of the form, there are three buttons: 'Browse Image', 'Refresh', and 'Next'. The entire content area of the window has a red background.

Figure 18: Reset Click Window

