

**Find Lost One (FLO):
An online based automated lost-and-found system for humans**

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**This Report Presented in Partial Fulfillment of the requirements for the Degree
of Bachelor of Science in Computer Science and Engineering**

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APPROVAL

This Project/internship titled “**Find Lost One (FLO): An online based automated lost-and-found system for humans**”, submitted by MAYSHA ISLAM FARABI and SHEHERJAN, ID No: 161-15-694 and 161-15-665 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 10th December, 2019.

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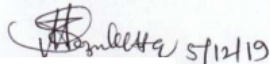
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DECLARATION

We hereby declare that; this project has been done by us under the supervision of **Md Nazmul Hoq, Lecturer, Department of CSE Daffodil International University**. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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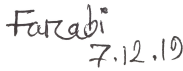
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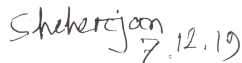
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ABSTRACT

This is a web based application, which is intended to find lost children using face recognition system. Use face recognition to find missing children and other victims of human tracking. Our application has faced recognition system which uses the camera of a mobile phone to take a picture of the lost one and matches it with the stored data. The objective of our application is to find the lost human. (Indian police trace 3000 missing children in just four hours using facial recognition technology. Using the same technology other countries have done a great job of finding their lost children. Our objective is to do the same for our country. Our user are everyone with an android mobile phone with a functional camera. Mainly the lost ones guardian will report the missing incident to the police. The police then will add the picture and information to our website.

They can find them by giving proper information in it. Now a days of information technology but many people are using traditional system when someone is lost, this need more time, by this website people find their know one who is lost within a short period also they will be informed their location. In the dynamic part this find lost one base website provides the users information when using the website in phone or computer. This Web Based find lost one system was designed and implemented using data collected from local people. These following scripting languages were employed: PHP, MySQL, HTML, Java Script and CSS. The system was implemented and tested with 50 students and 76% of them found that this site system is very useful.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Find lost one will be a web based project. From where a user can find the person can found his or her mate who is lost they can found by giving proper information in it. If a user search a person in this website, the website can define his/her location according to his/her information. Actually user can search his /her in find section.

When a user search person of web person can find his or her mate who is lost they can find by giving proper information is it. This concept define that a person can find within a short period now a day and it might be satisfy users life. From where a user an find the all ages person helping them to find. If a operator search somebody by his/her age, photo, date of lost, location, address this website his/her location according to information

Now a day of information technology many of people area using traditional system when someone were lost, this is so backdated, by this website people find their mate within short period also they would be informed their location. In the several part people can also input their data. This server shows this data by browsing the website. Above this website by parse data from server and we store them manually.

These above website can be obtained by parsing data from server and we store those data manually. So those data which are not available yet, will be stored on the server easily when they will be available. In the dynamic part this find lost one base website provides the users information when using the website in phone or computer. This Web Based find lost one project was intended and implemented using data gathered from local people and the final result is so satisfying.

1.2 Motivation

We have explored all over the internet to find out a good system for find lost one. But there is almost no application that can aid to implement. Then we discussed it to our supervisor. After listening the full idea, he also appreciates us to do this project and gave direction how we can start.

We can make something else which is more important. So, in this purpose we must say finding someone in website is one of the most important things. The design and implementation of this website is, particularly due to its functionality and requirements. Here the find lost one web based is need to be applicable for its true informative feature. Here we include details information on the server. So if the information is not for user that is troublesome. Basically who are new about the lost someone they get horrible situation. Reasons are given here:

- Lost someone - In our society lost someone now a day is very much trouble thing because its not so easy to find in such a kind of country where we are live with a millions of people. Also there is problem of movement so quickly one place to another . So its a very challenging issue now a day to find someone in easiest way. Even there is some problem if autistic child lost anywhere none of them say nothing nor even they say properly their location. On other hand the oldest person can't recognize their location in short time. So its a very trouble thing for a family to lost someone and get them back within a short period.
- Find Someone – Find someone is also a trouble thing in our country because of the population also location where they belongs. In our country if someone is lost they can't be found in easiest way. So we try to create a platform where people can find their mate by posting their information, image and they get them so easily.

1.3 Objectives

To make a good option this analysis is to help the user with the below ideas.

- We make a web application about find lost one. We need to fulfill some objectives.
- Include Intelligence in it.
- Make this application user friendly.
- Finding necessary resource.
- Passing control to the users to maintain their profile.
- Test this application for bugs and other errors.
- Do necessary coding and build up an Application.
- We scheme a web application that will help find lost people.
- We build a application that will benefit people get a decent understanding.

1.4 Expected Outcome

This structure will give some outcome. We discuss about it in below:

- Building a full automated web application.
- Suitable to use application.
- Get user review for specific person.
- Users can retain their profile.

1.5 Finding Techniques and Methods

Using this techniques and methods people can find a person. To find out the best technique some methods are given below:

- On-situation-mentoring: One of the best broadly used and most effective means is mentoring. It is the responsibility of the guide to afford general direction those who are victim and face a lots of problem when someone is lost.
- Guided experience: We need guided experience for betterment of our project.
- Format rotation: It is used to create a good project format.
- Individual Search: You might also know someone who is make a search someone have already lost and how to find him by this website that should be more helpful for further lost.
- Manage a situation: Sometimes we face and easily manage critical situation.
- Technical Programs: In this project we use some technical programs such as tensorflow ,face recognition etc.
- Awareness Expansion: Awareness should be implemented by general people and govt.
- Attending public occasion: By attending public occasion we can increase awareness.

1.6 Report Layout

Report format is given below about application of find lost one system.

- Subjects are covered with related material.
- Subjects are alienated with some paragraph thus it can be easy to recognize.
- Figures and images are used to get the topics content more easily.
- Specific margins and spaces are used to format the content.
- Bullet points are used to describe the content value more exact.
- Format are used to get all the matters more easily.

1.7 Summary

We cannot think of our daily life without modern technologies. After arriving this modern age we do not need to depend on anyone for anything. And lost someone is very trouble thing and nobody likes it. For removing dependencies, this system is very much helpful. This system will take all responsibility to give the best idea to finding someone. This is the main aim for creating this system.

The small body of published research on find lost one websites suggests that using finding a person in also every ages. Most of the evaluations of this websites found that the discernible impacts were in relation to people readiness. This includes improvements in young people's awareness and self-knowledge, increases in their satisfaction with their future problems prospects, increases in exploration behaviors, and improved confidence in making a decisions. Other studies found that this websites increased users' awareness of the support and advice that is available or gave them new ideas about find someone by exposing them to multimedia resources (particularly image) about person. These findings were apparent across a range of this types of websites.

CHAPTER 2

BACKGROUND

2.1 Introduction

It's the general opinion which advances in find lost one management describes the active and purposeful management of an individual. Explore someone is one of the most relevant website of user manual. It's a true challenge to build an Impress by this website to help people . They need to know about this website and work experience, how to find out and any professional achievements. When writing about this use field work success related language and make your history readable, interesting and related to the people you are find for good.

2.2 Related Work

There are no sites exactly like our system. But there is other sites which we can somewhat relate to our project. Here are some related websites those are featuring find lost one people and help users to find a better finding guideline.

Vision Box, a digital identity management solutions company [1] that donate a software that uses facial recognition technology. Company in Lisbon, Portugal, best known for its border control biometric deployments. The company will provided the software for one year, with the instructions it is only to be used to track down missing children.

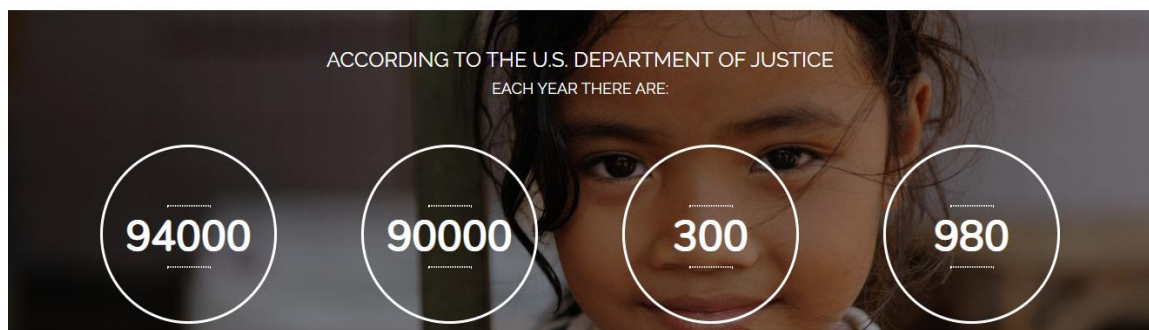


Figure 2.2.1: Reference site

LOFO [2] Materials & animals which have lost by someone can be found by this platform.



Figure 2.2.2: Reference site

2.3 Comparison

There is big differences among them. First of all, they don't contain all information what users need user's objective & user will be benefited. In existing systems information is poor type. There is not enough information. People can only know the specific details of any subjects. But it is not helpful development site like us. Users need to know every details of all subjects what will be beneficial for the users. So, we kept these in our mind we have created this system. People can only know the specific details of any subjects. But it is not helpful development site like us.

2.4 Challenges

In this find lost one development project there is some challenges.They are:-

- Setting WebSocket: It was not easy for us to setting websocket in our system because it was fully new to us. We faced real difficulties while implementing websocket. But, finally we did this in our system.
- People can only know the specific details of any subjects. But it is not helpful development site like us.
- One of the difficulties was collecting appropriate data for this system and give a user-friendly look the system and make this system reliable.

2.5 Summary

Before creating a system or develop a system it is very necessary to analyze the related work of that system. So after long time analyzing we have decided to make it and we fixed our goal which will remove the lacking of existing system.

CHAPTER 3

REQUIREMENT AND SPECIFICATION

3.1 UML Diagram

UML diagram is been discussed here. There are many types of UML diagram. We are going to discuss two of them. By using what we are going to discuss our entire system.

3.1.1 Use Case Diagram

It has actors they are connected to the structure and it describe the connection between the actors & entity.

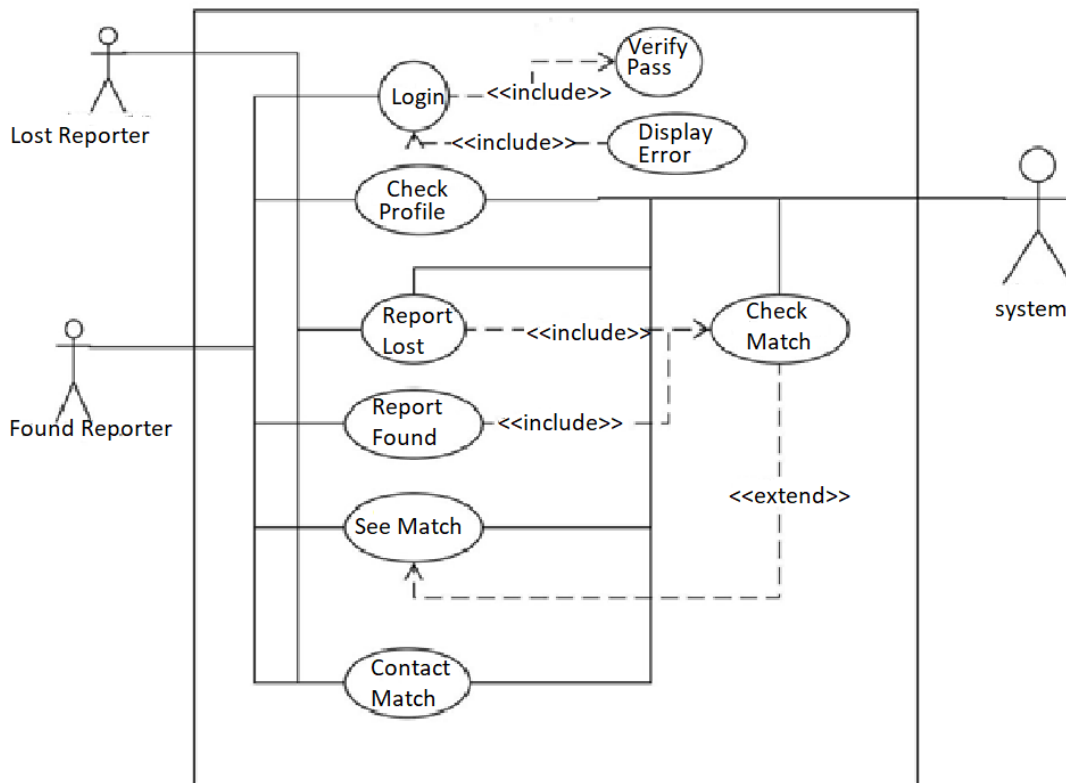


Figure-3.1.1.1: Use Case model.

3.1.2 Description of Use Case Model

In Use case diagram we can see there are three actors and they are (1) Lost reporter (2) Found reporter and (3) System. In this system user can log in and make all decisions. User can also posts. And user can do all kinds of thing like check profile,report lost,report found,see match. And post what will be displayed to user that will be shown after analyzing the user's profile.

Table 3.1.2.1 Use case of Log in:

Case	Detail
Actors	Lost reporter,Found reporter,System
Pre-Condition	Registration is needed.
Post-Condition	After Successful log in lost or found reporter will get access to features which is for logged in users.

3.1.3 System Flow Diagram

The whole system has main actors is user. Registration is must be needed for actor. First, we will talk about user. After completing registration when user is going to log in into the user have to give user name and password. After log in, user will be redirected to the category page where he/she can see multiple categories. After log in, user will get some new options like add post in our system, find any post with other users , update his/her profile, users field etc.User can update his/her profile from system & get dynamic value from users field category.User can see users post from dashboard & delete users too. In our system, user post from dashboard which will be shown to the main page of the system. User has all access of our system.

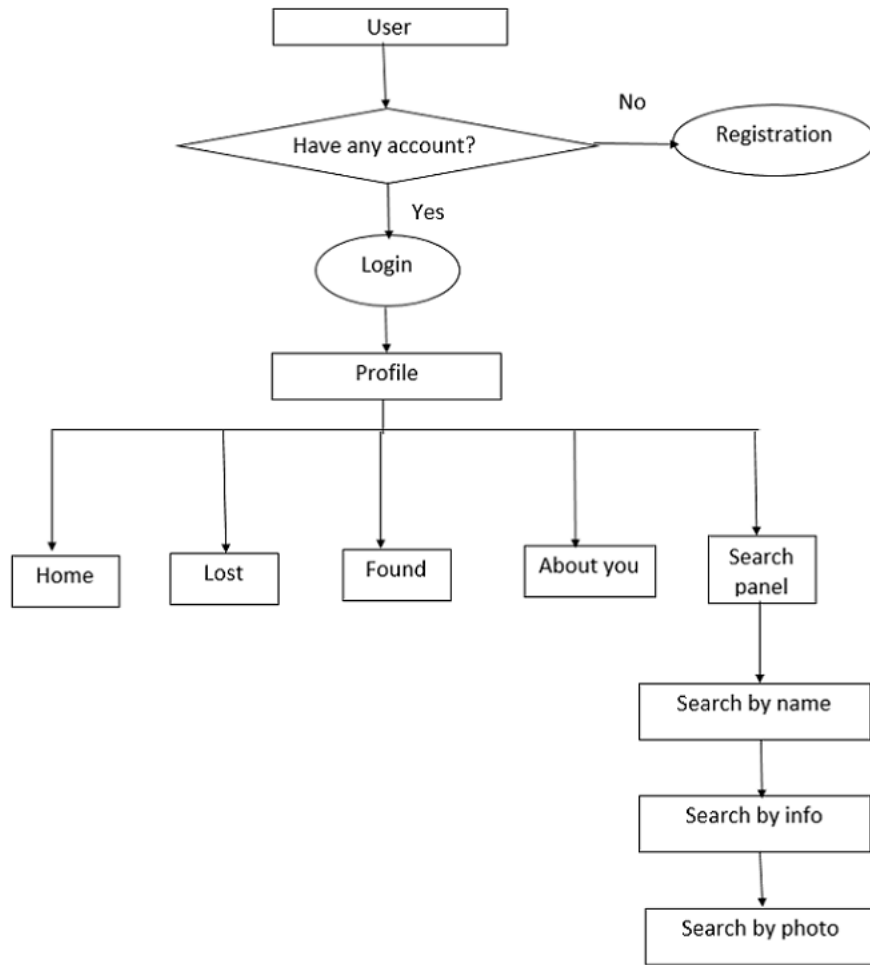


Figure-3.1.3.1: System Flow Diagram

3.2 Design Requirements

Create this system, we must some projects to create this project more easy. Our project has two categories of design.

When we create frontend design we looked-for to draw the lay diagram into paper first. When started coding of the frontend, we needed to bootstrap, bootstrap js, javascript, ajax & certain technical code for completing the project. So that's all design required in this project.

User can update his/her profile from system & get dynamic value from users field category. User can see users post from dashboard & delete users too. In our system, user post from dashboard which will be shown to the main page of the system. User has all access of our system.

3.3 Summary

In this chapter we discussed about the full project using use case diagram and system flow chart. We also described them elaborately.

CHAPTER 4

SYSTEM DETAILS

4.1 Introduction

Now we discuss briefly about our system. After completely reading this chapter anybody who has read this chapter will get the 100% idea about our application. Here our system features, front-end design, back-end database and implementation requirement.

4.2 Application Feature

There are various kind of features in our system. At first, we are going to show our features list and we will describe them later. So, the features of this system's are-

Home page : Home page has two button. Which are Registration & Login.

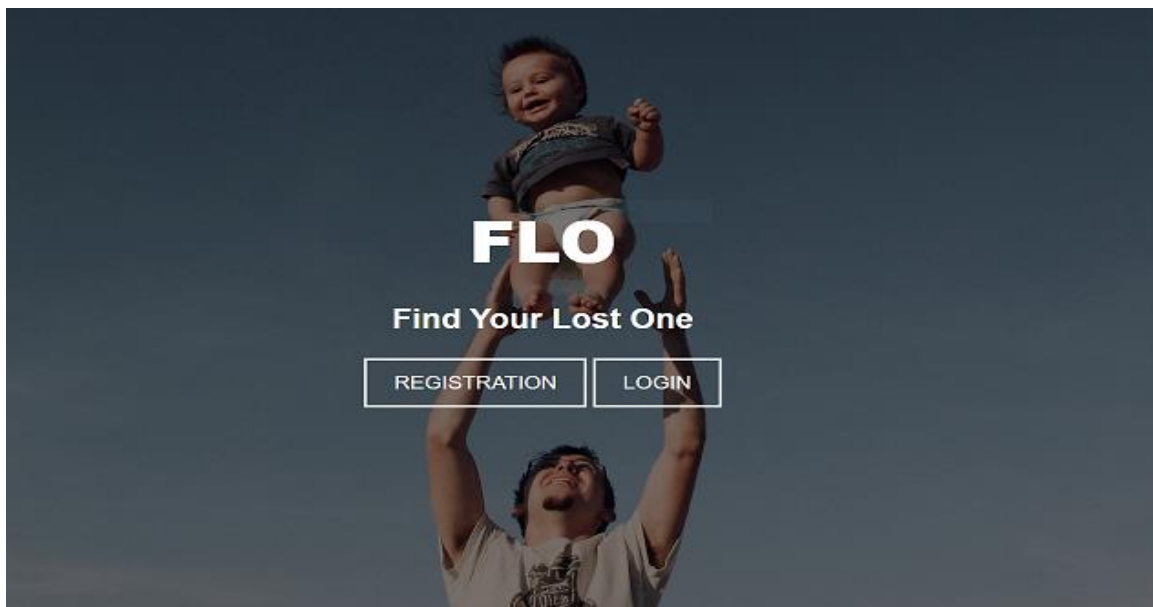


Figure 4.2.1: Home page

Registration : This is for user to access this system.To register user have to input some information like first name,last name,user name,email & a unique password.

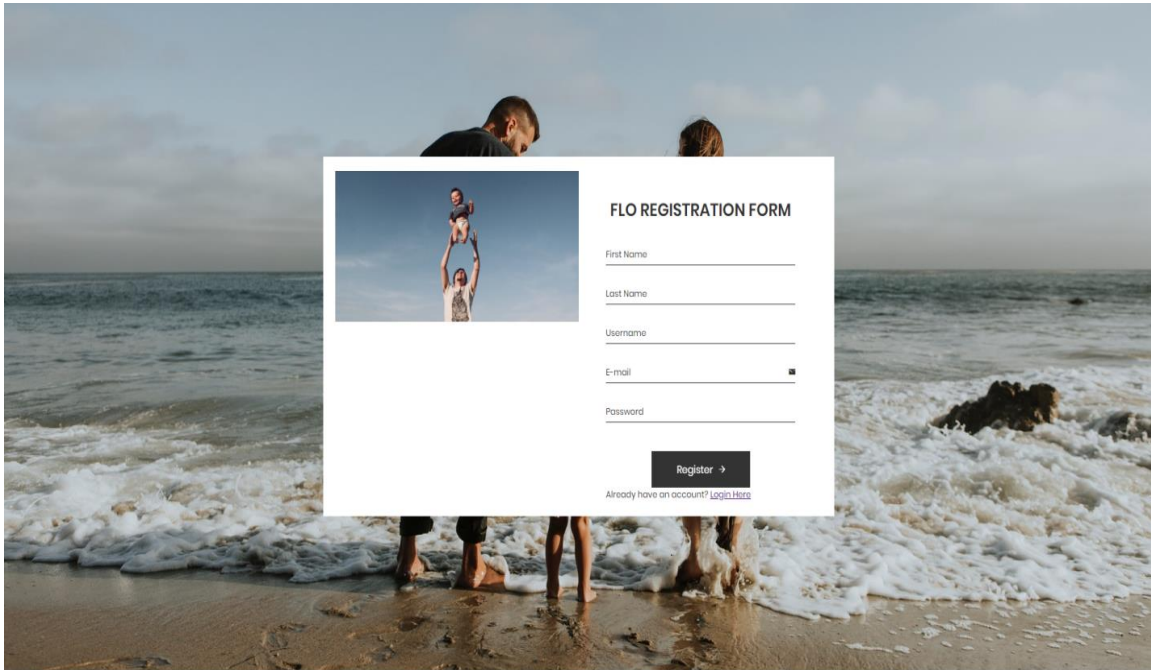


Figure 4.2.2: Registration page

Login into system : Without logging in nobody can use this system. For login user should provide user name which have to be unique & a password.

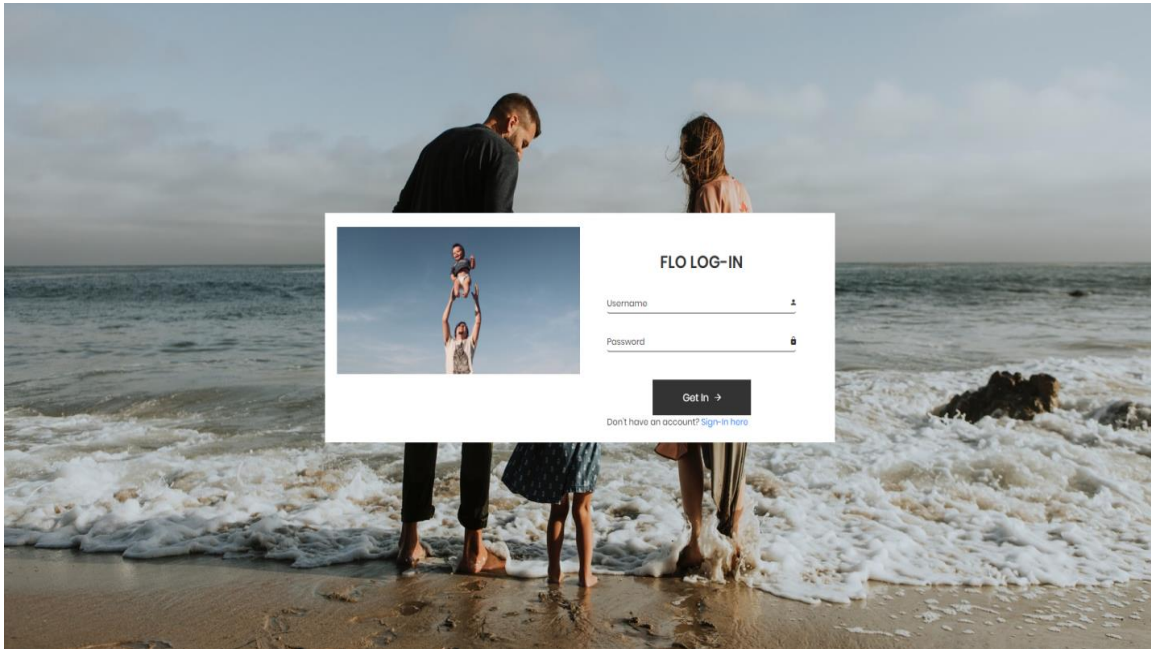


Figure 4.2.3: Login page

Create profile : By logging in user can create profile. Profile shows some informations of the logged in user like user name, name, email, phone no & address. From profile user can issue lost or found. User can also provide his or her image in the profile.

Enter your info : Users can also edit his/her profile if there is any mistake. If a user changes his/her house he have to provide his new address in the profile. Using this feature user can provide his changed information.

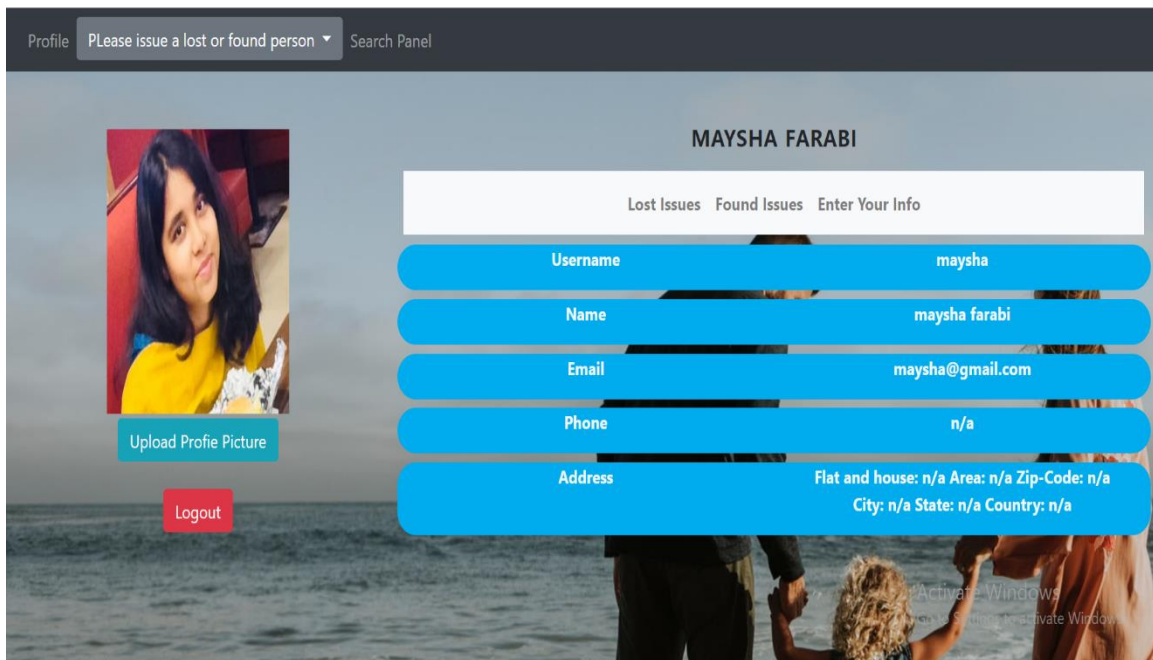


Figure 4.2.4: User profile

Issues : User can issue lost or found.

Submit lost issue : User can submit lost issue. In this lost issue entry form user have to fillup the fields such as fullname, father's name, mather's name, age, hight, lost date, lost location, skin tone, dress, contact no & others.

The screenshot displays a web application interface for submitting a lost issue. At the top, a dark navigation bar contains the links: Home, Lost, Found, About You, and Search Panel. The main content area features a large background image of a beach with waves. Overlaid on this is a white form titled "FLO LOST ISSUE ENTRY FORM". To the left of the form is a small image of a person holding a child up in the air. The form includes the following fields and instructions:

- Instruction: **Try to fillup all the fields. Write n/a if not applicable**
- Field: Full Name/ND Code or birthcertificate Code
- Fields: Father's Name, Mother's Name
- Fields: Age, Height
- Fields: Lost Date, Lost Location
- Fields: Skin-Tone, Dress
- Fields: Detailed Address, Contact No.
- Field: Others
- Submit Button: Submit →

Figure 4.2.5: Submit lost issue

Submit Found issues : User can submit found issue. In this found issue entry form user have to fillup the fields such as fullname,father’s name,mather’s name,age,hight,lost date,lost location,skin tone,dress,contact no & others.

FLO FOUND ISSUE ENTRY FORM

Try to fillup all the fields. Write n/a if not applicable

Full Name _____

Father's Name _____ Mother's Name _____

Age _____ Height _____

found Date _____ found Location _____

Skin-Tone _____ Dress _____

Detailed Address _____ Contact No. _____

Others _____

Submit →

Figure 4.2.6: Submit Found issue

Lost person profile : After lost issue a lost person profile will be created.Lost profile shows some information of lost person like fullname,father’s name,mather’s name,age,hight,lost date,lost location,skin tone,dress,contact no & others information.From this page user can directly search the lost person by name,advance search,& by photo.User can insert minimum two photos of lost person.

Profile Please issue a lost or found person Search Panel

naim123

Upload Photo-1 Upload Photo-2 Delete This Entry Your Profile

Name:	naim123
Name	naim123
Age:	25
Height:	5'9
Father:	naim F
Mother:	naim M
Lost Date:	2019-11-24
Lost Location:	comilla
Skin-Tone:	white
Dress:	
Address:	comilla
Other Information:	

Search Found Issues By Name

Advanced Search For Found

Search Found Issues By Photo

Figure 4.2.7: Lost person profile

Found person profile : After found a found profile will be created. Found profile shows some information of lost person like fullname, father's name, mather's name, age, hight, lost date, lost location, skin tone, dress, contact no & others information. From this page user can directly search the found person by name, advance search, & by photo. User can insert minimum two photos of found person.

Profile Please issue a lost or found person Search Panel

miraj

Upload Photo-1 Upload Photo-2 Delete This Entry Your Profile

Name:	miraj
Age:	25
Height:	57
Father:	miraj F
Mother:	miraj M
found Date:	2019-11-26
found Location:	naoga
Skin-Tone:	white
Dress:	pink
Address:	tongj

Other Information:

Search Lost Issues By Query

Advanced Search For Lost

Search Lost Issues By Photo

Figure 4.2.8: Found person profile

Search : User can search his or her lost or found person

Lost person search by name : User can search lost person. User simply have to input the lost person name & the system will automatically show the list of lost person of the same name.

Found person search by name : User can search found person. User simply have to input the found person name & the system will automatically show the list of found person of the same name.

Start typing a name in the input field below:

First name:

naim

Figure 4.2.9: Search by name

Lost person search by photo : User should enter his/her lost person's image after successfully loaded. User can choose the file or image from his device.

Found person search by photo: User should enter his/her found person's image after successfully loaded. User can choose the file or image from his device.

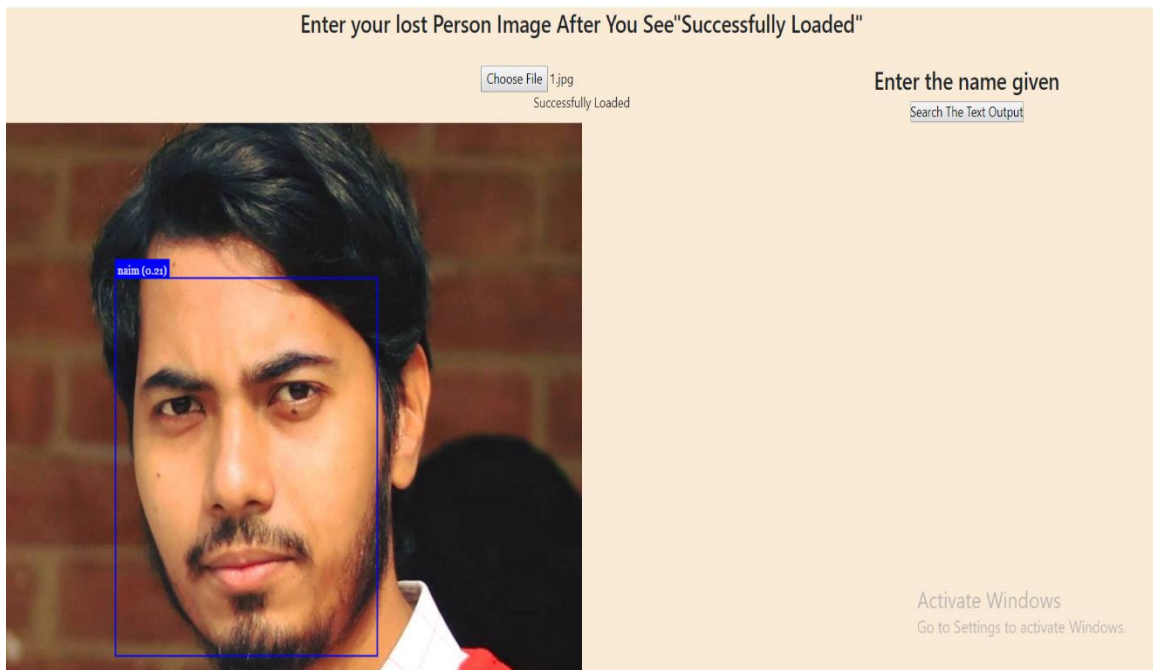


Figure 4.2.10: Search by photo

Main database: Following figure shows the main database. Main database has three table they are, user,lost,found. Our database name is ‘a’.

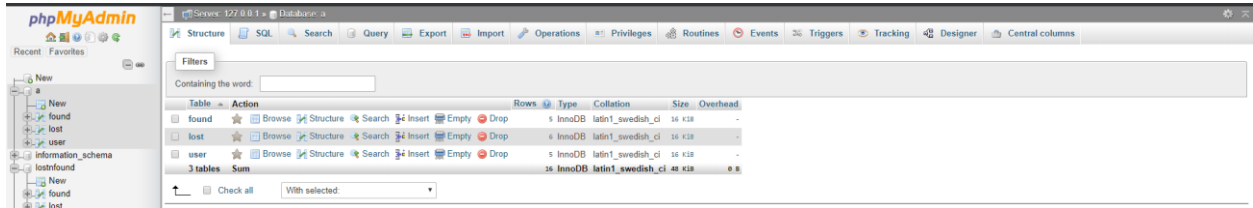


Figure 4.2.11: Main database

Found table: Following figure shows the found database page. When a user issues a found person his/her data will be stored in this found table. So found person’s information is in this table.

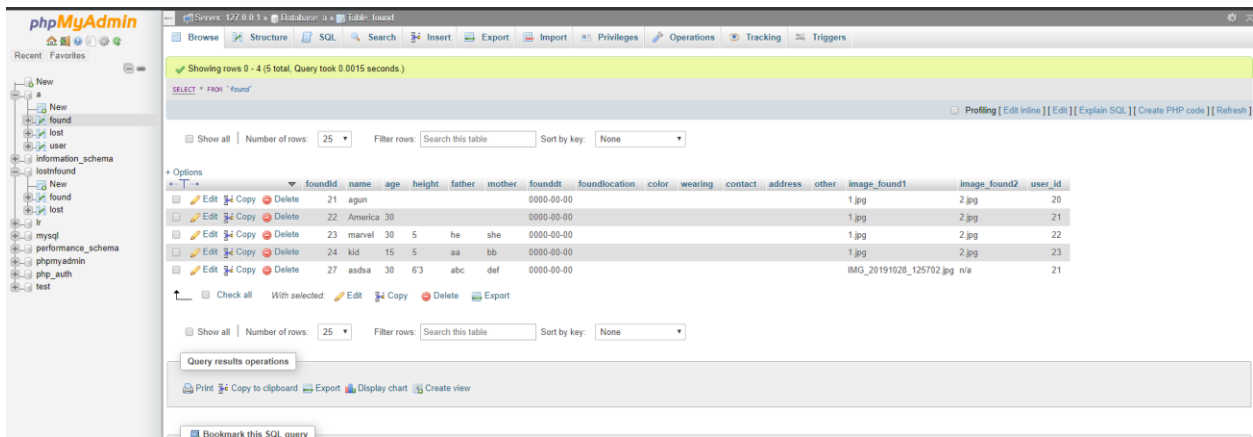


Figure 4.2.12: Found database table

Lost table: Following figure shows the lost database page. When a user issues a lost person his/her data will be stored in this lost table. So lost person's information is in this table.

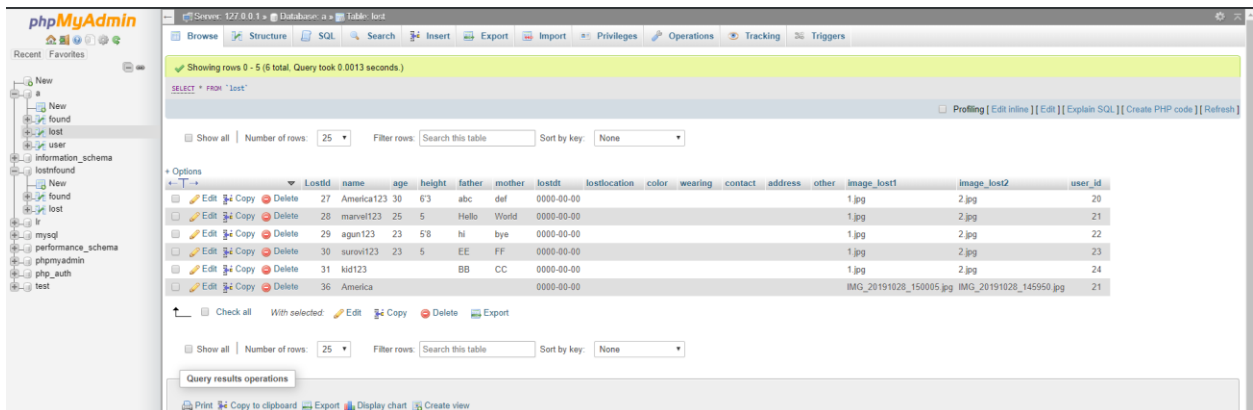


Figure 4.2.13: Lost database table

User table: Following figure shows users database table page. When a user register in this system his/her data will be stored here. After registration user information will be here.

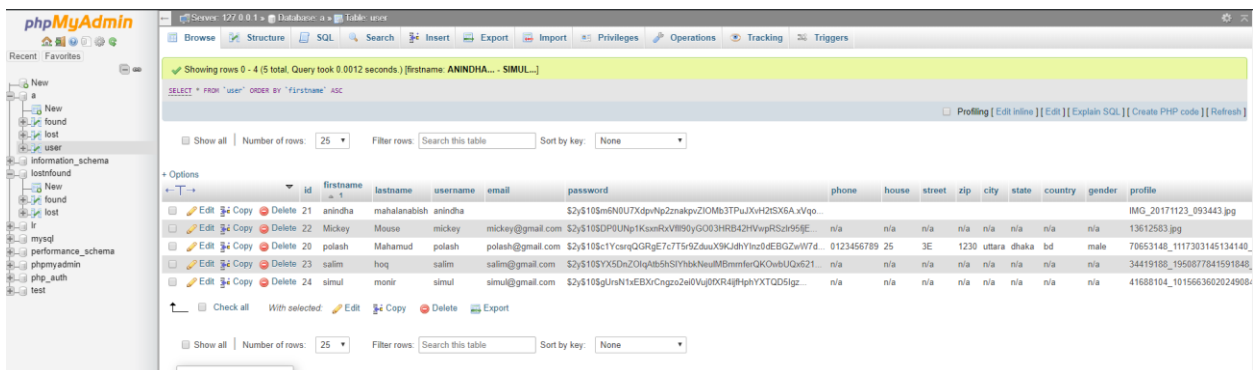


Figure 4.2.14: Users database table.

4.3 Implementation Requirements

These are following things and technology that we need to implement this project.

Internet Browser [3]: Internet browser is a software that is use to access the internet. So internet browser is needed to access our site.

Xampp Server [4]:Xampp is a free open source server site bundle. In our site we used xampp to store data.

Text Editor (ex: PHP strome) [5]: A text editor is a program that help edit plain text.We used text editor to write our code easily.

HTML 5 [6]: Html is a markup language. Html 5 is a more software solution or making html better. We used html 5 to create our site.

PHP 7 [7]: PHP is a programming language used to develop web site.We used php for our backend purpose.

CSS [8]: CSS is used along side html to make the web page more attractive.

jQuery 3.0+ [9]: To make java script more easy to use and for making html dom management more easy jQuery a java script library is used.

Bootstrap 4 [10]: Bootstrap is a free frontend frame work.For our site we used bootstrap 4 to make our site more user friendly.

JavaScript [11]: It is a programming language.We used java script for dom manipulation.

Ajax [12]: To make java script more easy to use and for making html dom management more easy ajax a java script library is used.

Tensorflow [13]: Tansorflow is a open source library or dataflow and differential programming.

4.4 Summary

This system will give a very effective and detail information about Find Lost one. It will be the best web application for anyone. This will be the first application for Bangladesh from where user can get enough details about different kind of subjects. Before creating a system or develop a system it is very necessary to analyze the related work of that system. So after long time analyzing we have decided to make it and we fixed our goal which will remove the lacking of existing system.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Introduction

Here we are using face-api.js to match lost and found person in our database .Face-api.js is a javascript unit, constructed on top of tensorflow.js core, which apparatuses several CNNs (Convolutional Neural Networks) for face recognition for the web and for mobile devices.

5.2 Implementation

5.2.1 Face Detection system

We have to first trace all the faces in the input image. Face-api.js apparatuses multiple face detectors for different usecases.

The most accurate face detector is a SSD (Single Shot Multibox Detector), which is basically a CNN based on MobileNet V1.

Face-api.js even implements an optimized Tiny Face Detector, basically an even tinier version of Tiny Yolo v2 , which is a much faster, but slightly less accurate face detector compared to SSD MobileNet V1.

Finally, there is also a MTCNN (Multi-task Cascaded Convolutional Neural Network) implementation. The networks return the bounding boxes of each face. The marks are used to unpollute the bounding boxes, as there might an image does not cover any face at all.

5.2.2 Face Landmark Detection and Face Alignment system

We need to call attention to that we need to adjust the bounding boxes, with the end goal that we can extricate the pictures focused at the face for each crate before passing them to the face acknowledgment organize, as this will make face acknowledgment substantially more exact.

5.2.3 Face Recognition system

Presently we can bolster the mined and went face pictures into the face acknowledgment organize, which is based on a ResNet-34 like design and for the most part parallels to the engineering applied in dlib. The system has been prepared to figure out how to delineate attributes of a human face to a face descriptor (a component vector with 128 qualities), which is additionally customarily expressed to as face embedding.

We will utilize the face descriptor of each mined face picture and contrast them and the face descriptors of the reference information. We can figure the Euclidean space among two face descriptors and audit whether two faces are comparable dependent on an edge esteem (for 150 x 150 measured face pictures 0.6 is a decent limit esteem).

5.3 Coding

5.3.1 Loading the Model Data

```
const imageUpload = document.getElementById( elementId: 'imageUpload')

Promise.all( values: [
  faceapi.nets.faceRecognitionNet.loadFromUri('models'),
  faceapi.nets.faceLandmark68Net.loadFromUri('models'),
  faceapi.nets.ssdMobilenetv1.loadFromUri('models')
]).then(start)
```

The model loads have been quantized to diminish the model file size by 75% contrasted with the first model. Besides, the model loads are part into lumps of max 4 MB, to enable the program to store these documents, with the end goal that they just must be stacked once.

5.3.2 Receive a Full Description for all Faces from an Input Image

```
imageUpload.addEventListener( type: 'change', listener: async () => {
  if (image) image.remove()
  if (canvas) canvas.remove()
  image = await faceapi.bufferToImage(imageUpload.files[0])
  container.append(image)
  canvas = faceapi.createCanvasFromMedia(image)
  container.append(canvas)
  const displaySize = { width: image.width, height: image.height }
  faceapi.matchDimensions(canvas, displaySize)
  const detections = await faceapi.detectAllFaces(image).withFaceLandmarks().withFaceDescriptors()
  const resizedDetections = faceapi.resizeResults(detections, displaySize)
  const results = resizedDetections.map(d => faceMatcher.findBestMatch(d.descriptor))
  results.forEach( callbackfn: (result, i) => {
    const box = resizedDetections[i].detection.box
    const drawBox = new faceapi.draw.DrawBox(box, { label: result.toString() })
    drawBox.draw(canvas)
  })
})
```

The neural nets get HTML picture, canvas or video components or tensors as information sources. A full face depiction holds the identified outcome (bounding box + score), the face tourist spots just as the figured descriptor. By precluding the subsequent choices parameter of `faceapi.detectAllFaces(input, alternatives)` the SSD MobileNet V1 will be utilized for face identification naturally. The returned jumping boxes and milestone positions are comparative with the first picture/media size. In the event that the showed picture size doesn't parallel to the first picture size you can just resize them. We can imagine the recognition results by drawing the bouncing boxes into a canvas. for perception, is to overlay a totally situated canvas over the img segment with a similar width and tallness.

5.3.3 Face Recognition

```
function loadLabeledImages() {
  const labels = ['agun', 'America', 'marvel', 'kid']
  return Promise.all(
    labels.map( callbackfn: async label => {
      const descriptions = []
      for (let i = 1; i <= 2; i++) {
        //const img = await faceapi.fetchImage(`https://raw.githubusercontent.com/WebDevSimplified/Face-
        const img = await faceapi.fetchImage(`labeled_images/${label}/${i}.jpg`)
        const detections = await faceapi.detectSingleFace(img).withFaceLandmarks().withFaceDescriptor()
        descriptions.push(detections.descriptor)
      }

      return new faceapi.LabeledFaceDescriptors(label, descriptions)
    })
  )
}
```

Presently the recovered the areas and descriptors of all faces given an information picture. These descriptors will be our reference information. Arrogant we have some model pictures for our subjects accessible, we initially get the pictures from a url and make HTML picture components from their information supports utilizing `faceapi.fetchImage`. For each brought picture we will at that point recognize the subjects confront and figure the face descriptor.

5.3.4 Summary

The same process runs twice in our system. Once for found database and once for lost database.

CHAPTER 6

CONCLUSION AND UPCOMING POSSIBILITY

6.1 Discussion and Conclusion

We tried our finest effort to do this project. Now we've also made this report as user friendly so that it feels like step by step we have update this project.

While doing this project, we've learned about real life programming. Though, it's not a very big project we've tried to use as much as tools we could use.

6.2 Possibility for Additional Development

Our planning is to extend this system in future. There are some extra features like rating system in posts, rating system in comments etc that we want to implement in coming future. We have a plan to develop a admin panel too

Appendix

Appendix A: Research Reflection

Now a days of information technology but many people are using traditional system when someone is lost, this need more time , by this website people find their know one who is lost within a short period also they will be informed their location. In the dynamic part this find lost one base website provides the users information when using the website in phone or computer. This Web Based find lost one system was designed and implemented using data collected from local people.

Appendix B: Related Issues

There are no sites exactly like our system. But there is other sites which we can somewhat relate to our project. Here are some related websites those are featuring find lost one people and help users to find a better finding guideline.

References:

- [1] Vision Box, a digital identity management solutions company ENCES available at <<<https://www.facefirst.com/industry/missing-children/>>>
- [2] LOFO available at: <<<http://www.lofo.global/>>>
- [3] Internet browser available at <<https://www.google.com/chrome/?brand=CHBD&gclid=EAIaIQobChMly_ez6_2d5glVCA4rCh2B-wHQEAAYASAAEgKYJPD_BwE&gclsrc=aw.ds>>
- [4] Xampp Server available at << <https://www.apachefriends.org/download.html> >>
- [5] PHP strom available at:<<<https://www.jetbrains.com/phpstorm/download/>>>
- [6] HTML 5 available at: << <https://www.w3schools.com/htm> >>
- [7] PHP 7 available at: << <https://www.w3schools.com/php> >>
- [8] CSS available at: << <https://www.w3schools.com/css/default> >>
- [9] jQuery available at <<<https://stackoverflow.com/>>>
- [10] Bootstrap available at << <https://getbootstrap.com/> >>
- [11] JavaScript available at: << <https://www.w3schools.com/js> >>
- [12] Ajax available at <<<https://stackoverflow.com/>>>
- [13] Tensorflow available at <<<https://itnext.io/face-api-js-javascript-api-for-face-recognition-in-the-browser-with-tensorflow-js- bcc2a6c4cf07> >>

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