

## An Android Based Application to Find Missing Children and Lost Belongings (F.I.N.D.)

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**Abstract:** Locating Missing Items Is A Challenging Complication That People Face Frequently. F.I.N.D. Is An Attempt To Solve This Problem By Taking The Advantage Of Interactions Among People. The Proposed System Will Implement An Android Application Which Will Help The Users To Find Lost Items And Missing People. Nowadays, Smart Phones Have Brought Us Closer And Have Created A Platform For People To Interact Socially. When A Particular Object Is Lost, The Only Way To Find It Is Through Police But The Proposed System Will Help People Interact Through The Application And Contact The Owner If The Lost Object Is Found. The Application Will Also Help Find Missing People. Using This Application, Will Help The User Register Their Complaint On The Application And If The Complaint Details Match With The Registration In Found Section, The User Will Be Informed About Object/Person. The Lost Objects Will Be Sorted By Location.

**Keywords**– Find, Missing, Lost, Location, People, Belongings

### I. INTRODUCTION

All Of Us Have Things Which Are Quite Expensive Or May Seem A Lot For Us And Losing Them Might Be Very Depressing. Nowadays, Mobile Technology Comes To The Aid For Both Losses And Finds. Mobility And Flexibility Allow People To React Faster; Moreover It Is An Incredibly Convenient Way To Solve Such Problems. For Example, FIND Application Allow Its Users To Instantly Report About Losses And Finds, Make Photos Of Lost Or Found Items, Instantly Connect With Other Users, Create Database Of Things And Always Have It Handy.

According To Statistics, A Total Of 884 People Go Missing From Mumbai Every Month. Though The Responsibility Of Tracking Those Lies With The Police, But Our Application Will Help Even A Common Person Be A Part Of The Search. By Providing This Application To Different NGO's/Police Departments, Many Cases Of Missing People Could Be Solved Reducing The Effect Of Human Trafficking At Certain Level.

Over Almost 20,000 Women And Children (Timesofindia.Indiatimes.Com, Dated- 10th March, 2017) Were Trafficked In India In 2016. The Proposed Application Will Be A Platform Or A Small Initiative To Stop This Count From Rising And Will Also Aim At Helping People. The Proposed Approach Will Also Be Location Specific And User Friendly.

Concerned Authorities Will Be Involved In Case Of Missing People. The Proposed Application Offers Unique Benefits For Those Who Have Lost Anything; However, Such Applications Are Useful For Everyone

### II. AIMS AND OBJECTIVES:

1. To Register Complaints And View All The Complaints By Using Which, Trusted Members Will Be Able To Find Missing People In Various Areas.
2. To Conveniently Register A Complaint On Database Without Actually Having To Visit A Police Station Which Will Help In Saving User's Time. This Can Be Also Be Used As A Temporary Proof Of The Complaint And The Incident.
3. To Enable Easy Way Of Communication For Users By Providing Detailed Profiles.
4. To Report A Found Object Or Person Easily By Only Uploading The Image Of It With Some Additional Information (Which Will Not Be Mandatory).
5. To Analyze Total No. Of People Missing And If Possible Track The Pattern Of Missing People To Know The Reason Or Source Behind It.

### III. LITERATURE SURVEY:

- **Missingx**- Missingx Is The World's Largest, Database Of Lost And Found Property, Partnered With Travel Companies In Many Major Travel Destinations Across The World, Helping To Reunite A Large Number Of Lost Items With Their Owners. Looking After Your Bags While Travelling, Can Be One Of Your Biggest Worries. You May Find Something That A Fellow Traveller Has Left Behind. With This App, You

Can Quickly Register A Lost Or Found Object, Inbuilt GPS Accurately Records The Location, And The System Matches The Item To The Owner Who Is Registered And Notifies Them. They Can Then Verify And Claim Their Property Which Can Be Collected Personally. The Internal Messaging System Keeps Your Identity Details Secure Unless And Until You Wish To Share Contact Details. You May Also Advertise A Reward For Your Lost Item, Or Have It Featured, To Make It More Attractive And Increase The Chances Of Getting Your Lost Item Back. The Near Me Feature Shows All Registered Lost And Found Items Which Are Close To Your Current Location.

- **Lost Or Found**- Lost Or Found Is An Android Application For Reporting Lost, Stolen Or Found Items On The Following App. You Can Also Search For The Lost Or Found Items That Are Being Added By Others. It Aims To Serve As A Worldwide Online Database Of Lost, Stolen, And Found Items And Missing People. As Soon As You Lose Or Find Something, All You Have To Do Is Register Complaint Details About Lost Or Found Item In This Application. This App Is Not Limited For Lost Or Found Items Only But Has An Additional Feature. It Can Also Be Used To Report Missing People Or Children That Will Help Those Who Have Lost Their Loved Ones To Reunite Quickly.
- **Paw Boost** - This App Is Available Only For Ios Users. This App Is Designed To Find Lost Pets. The Way To Report Any Lost/Found Pet Is Through Registration On The Given App By Entering A Photo And Any Distinguishing Detail. The Owner Is Notified Once The Details Match From The Lost And Found Section.

#### **IV. F.I.N.D SYSTEM WORKING**

The Scope Of The Proposed System Is To Find Missing Person. In Case Of Lost Belongings The User Can Only Register Complaints Of Predefined Objects Such As Documents, Electronic Appliances Etc. It Is A Newer And Better Approach Which Involves Finding Lost Objects Using Location Specific Details. The Proposed System Will Be Mainly Used By Police Stations To Get The Lost Objects Their Appropriate Owners. Along With The Police Department It Will Also Be Used By Certain NGO's Who Put Efforts To Find Missing Children And Reunite Them With Their Families.

1. When A User Opens The Application For The Very First A Sign Up Page Will Appear Where He/She Has To Create An Account Using The Phone Number, After Entering The Information An OTP Will Be Sent For Secure Communication And Authentication.

2. Once The User Is Done With All The Prerequisite Steps He Is Then Able To Upload A Found Object Or Person Or Register A Complaint For Any Of The Above. For This Two Separate Modules Are Provides For The Ease Of User.

**A.** Registering A Complaint For Lost Object Or Person Once The User Logs Into His Account He Will Be Able To See Two Modules On The Home Screen Out Of Which One Will Be Objects And The Other One Will Be Person. He Then Must Select The Appropriate Section Where He Will Find Option Saying Register A Complaint. Ongoing That Screen The User Will Be Able To Register A Complaint After Providing All The Necessary Information Related To That Particular Object Or Person.

**B.** Reporting A Found Item Or Person. Once The User Logs Into His Account He Will Be Able To See Two Modules On The Home Screen Out Of Which One Will Be Objects And The Other One Will Be Person. He Then Must Select The Appropriate Section Where He Will Find Option Saying Report A Found A Person Or Object. Ongoing That Screen The User Will Be Able To Report A Finding By Image Of It With Some Addition Information.

#### **V. PROPOSED METHODOLOGY:**

- This Application Can Help A Person Find His/Her Phone Over A Certain Area I.E. In The Vicinity. For Further Registering A Complaint For Lost Object Or Person: Once The User Logs Into His Account He Will Be Able To See Two Modules On The Home Screen Out Of Which One Will Be Objects And The Other One Will Be Person. He Must Then Select The Appropriate Section Where He Will Find Option Saying Register A Complaint. Ongoing In That Screen, The User Will Be Able To Register A Complaint After Providing All The Necessary Information Related To That Particular Object Or Person.

- **FACE RECOGNITION:**

In The Backend Of The Application, We Used Viola-Jones Algorithm For Face Detection; Which Extracted Features For The Database Of Missing/Found People. [3]

PCA Algorithm Was Used For Face Recognition Which Is A Statistical Approach Used For Reducing The Number Of Variables. Using PCA, Every Image In Database Is Represented As Linear Combination Of Weighted Eigen Vectors. Face Recognition Is Performed By Projecting A Test Image From Database Onto The Subspace Spanned By The Eigen Vectors And Then Classification Is Done By Measuring Minimum Euclidean Distance.

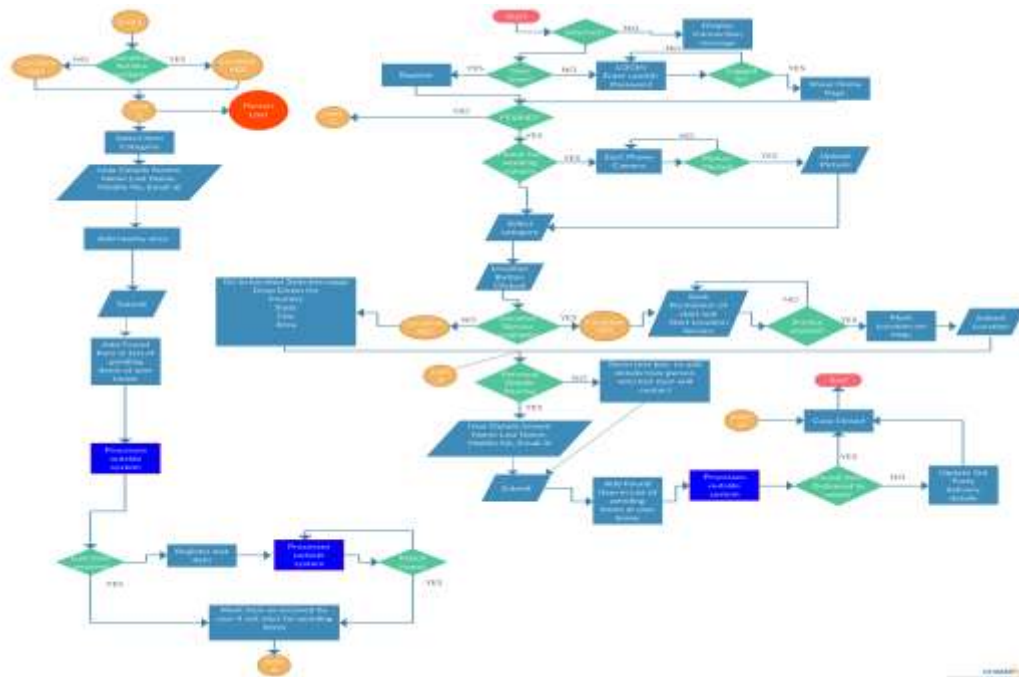
➤ OBJECT DETECTION:

Speeded-Up Robust Features Will Be Used For Detecting And Extracting Features From Object Image Database. On The Other Hand, The Description Of The Image Will Be Matched Using String Comparison Function (Strcmpi).

The App Will Allow The User To Upload A Basic Picture Of The Item And Extra Specification Regarding The Object In The Description Space.

➤ FLOW DIAGRAM:

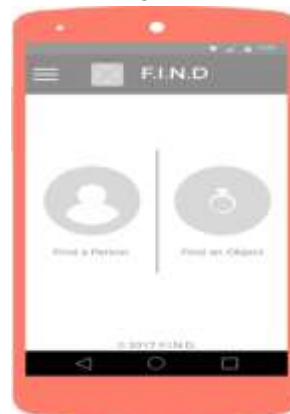
The Following Flow Diagram Gives An Overview Of The Entire Working Of The Application. Right From Login To All The Intermediate Steps And End Results Are Explained In The Following.



SIGN UP



HOME



SIGN UP:

- When The User Visits The App For The First Time, They Need To Sign Up To Use The App.
- To Check If The User Is Valid, A Mail Is Sent To The Registered Email-Id From Where A Confirmation Is Needed To Proceed.
- Once The User Signs Up, He Is Directed To Login Page To Use The App.

HOME PAGE:

- Home Page Contains Two Buttons Namely, Person, Belongings.
- These Two Main Menu Bifurcate The Traffic Leading To Specific Search And Entries.
- On The Left Is The App Drawer Menu.

MAIN PAGE



MAIN PAGE:

- The Submenu Will Help User Report Whether They Have Lost Or Found A Person Or Belonging.
- See On Map Feature Will Allow The User To Locate The Different Items Reported At Different Places With The Help Of Pins On The Map.
- List Of All The Recent Activities Related To That Menu Will Be Visible Here.

**VI. CONCLUSION:**

F.I.N.D Application Can Help In Finding Lost Objects With Great Efficiency And Comfort. Also It Can Provide Leads To Government Bodies Like Police Department Or Ngos Who Work Immensely On Finding Missing People. Search Location Feature Will Enable These Bodies As Well As The Users To Locate Their Lost Objects Found In Different Localities.

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