

# LOST & FOUND PORTAL

## REPORT

LO&T



FOUND

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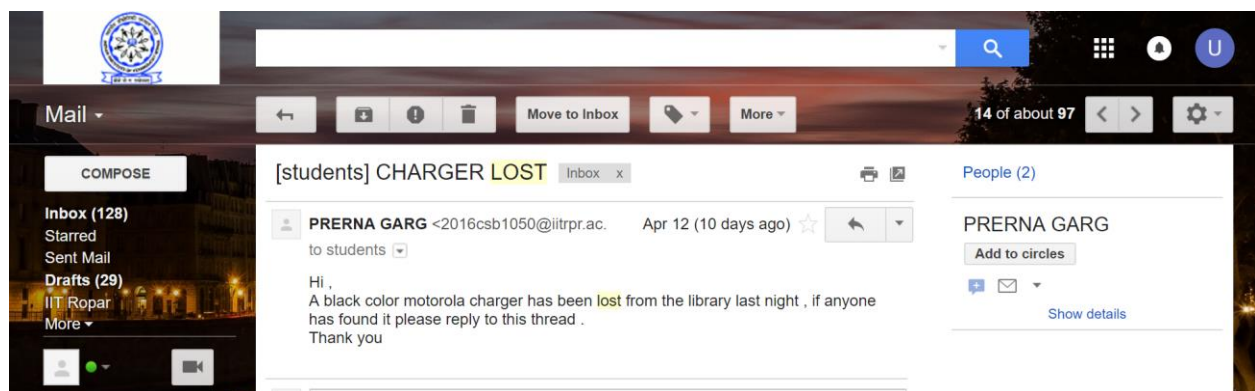
UNIT PATEL 2015CSB1038

SOUMYADEEP ROY 2015CSB1035

## PROBLEM STATEMENT

While living or working in a college, it is extremely common for people to misplace some of their essential belongings. The current scenario is such that misplacing an object becomes a terrifying experience for the person because of the sheer size of the area that has to be searched in order to find the lost item back. Moreover, if someone has found an item and nobody is nearby to claim it then who will the item be returned to.

The only approach that a person in such a case resorts to is to send an e-mail on broadcast about the lost/found item.



This approach is however not optimal, mainly because such random mails are not only a spam message for majority of the people but also because of the fact that these mails are very hard to keep track off.

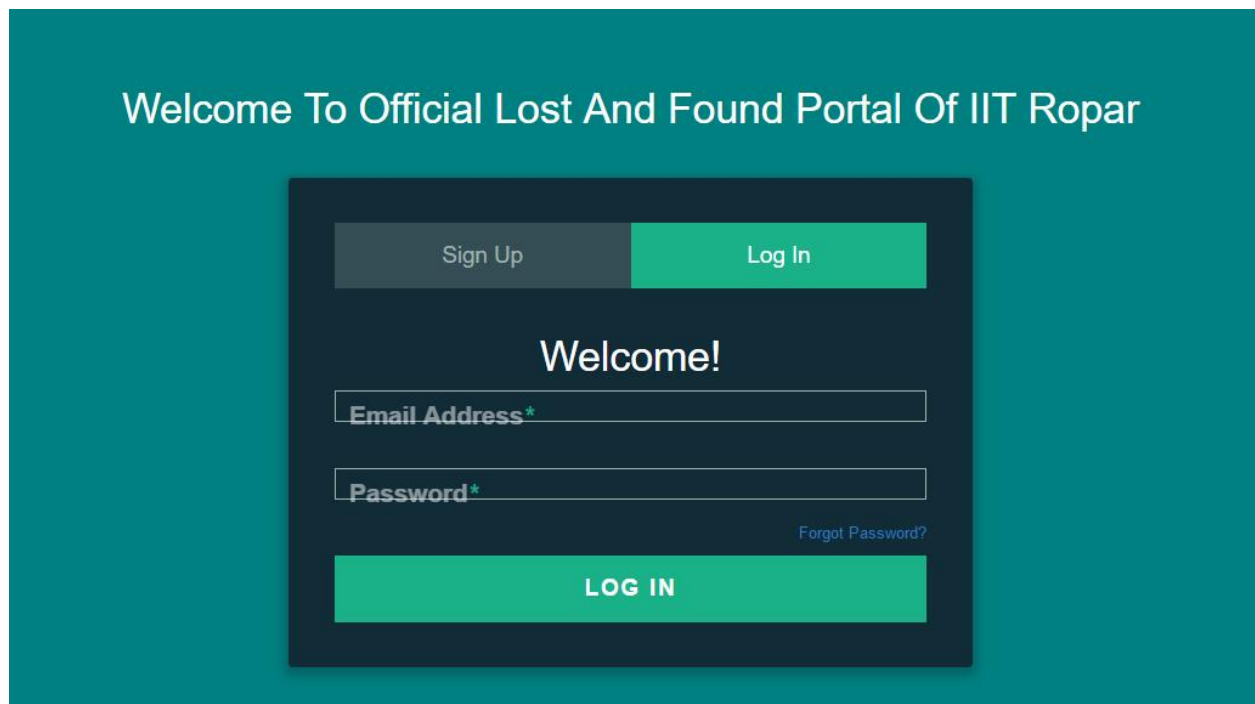
With the motivation of solving these problems elegantly and smoothly our group decided to launch a "Lost and Found" webpage for our college. Our web page will be able to take in both queries about a lost or found item and depending on the entries we will be able to return the lost item back to it's rightful owner. We aim to create a centralized platform via which all the interaction between the people who lose an item and their founders can be performed.

# FUNCTIONAL DESCRIPTION

## GETTING STARTED

Open the link 10.1.1.19/~2015csb1015/Lost, when connected to college internet network.

## LOGIN



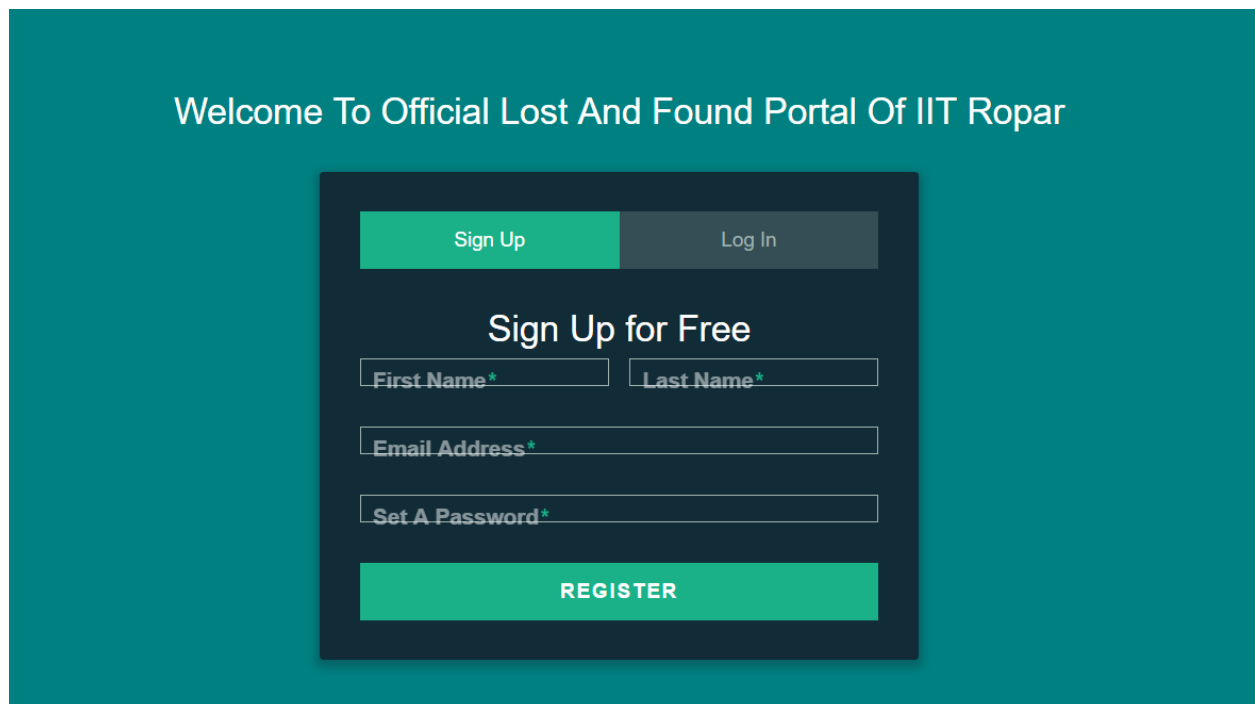
The screenshot shows a login interface for the 'Official Lost And Found Portal Of IIT Ropar'. The background is a solid teal color. In the center, there is a dark blue rectangular box containing the login form. At the top of this box, the text 'Welcome To Official Lost And Found Portal Of IIT Ropar' is displayed in white. Below this, there are two buttons: 'Sign Up' (dark grey) and 'Log In' (teal). The 'Log In' button is highlighted. Underneath the buttons, the word 'Welcome!' is written in white. There are two input fields: 'Email Address\*' and 'Password\*', both with white text and a small red asterisk indicating they are required. To the right of the 'Password\*' field, there is a link that says 'Forgot Password?'. At the bottom of the form, there is a large teal button with the text 'LOG IN' in white capital letters.

To login, enter your registered Email ID and your password and press "LOG IN". If not registered yet, click on "Sign Up".

## SIGN UP

To create a new account on Lost and Found, enter the following credentials correctly.

1. First Name
2. Last Name
3. Valid Email Address ([pqrs@xyz.com](mailto:pqrs@xyz.com))
4. Password (No restrictions)

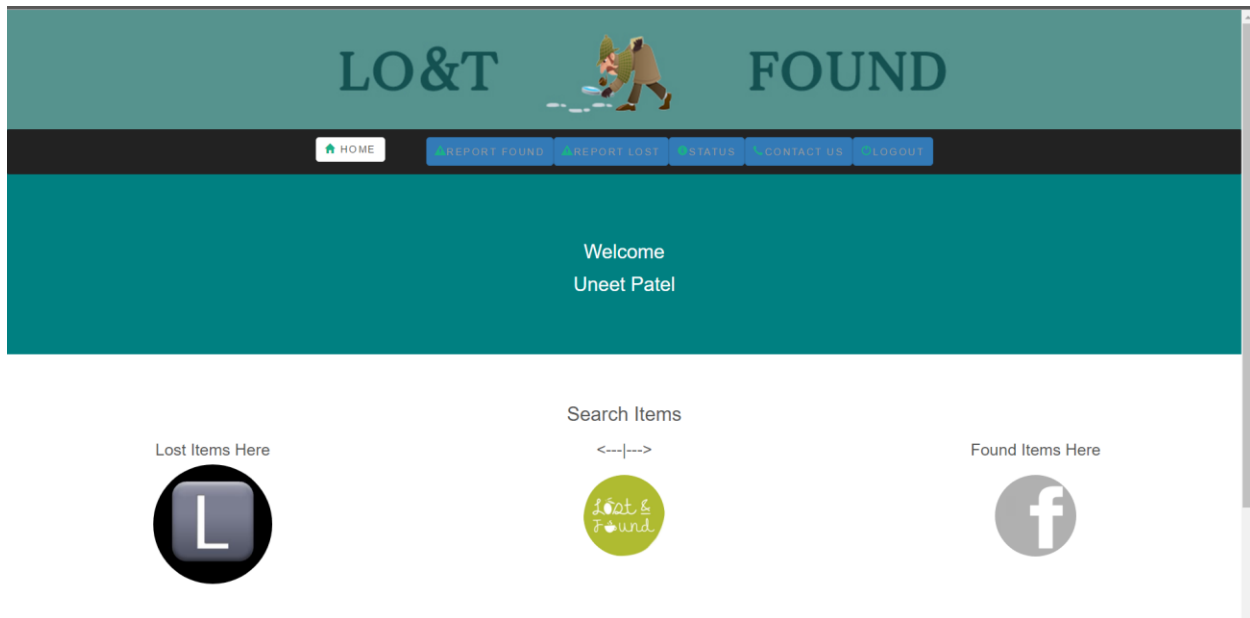


The screenshot shows a web interface with a teal background. At the top, it says "Welcome To Official Lost And Found Portal Of IIT Ropar". Below this is a dark blue box containing a sign-up form. The form has two tabs: "Sign Up" (active, green) and "Log In" (grey). The title "Sign Up for Free" is centered. The form fields are: "First Name\*" and "Last Name\*" (two separate boxes), "Email Address\*" (one box), and "Set A Password\*" (one box). At the bottom of the form is a large green button labeled "REGISTER".

Now click on "REGISTER" Button and you will be registered on LOST AND FOUND. Next time, you can login with your registered email and password.

## HOME

After login, you will be directed to our homepage.



The links to the images of 'L' and 'f' gives the glimpse of the lost and found database(5 entries maximum) respectively.

### List of Found Items Reported

| S.No. | Name    | Item Lost   | Item Description | Location                   | Contact E-mail |
|-------|---------|---|------------------|----------------------------|----------------|
| 1     | Srinadh | Camera , Brand - Panasonic, Model - GTX38 Color - Red |                  | Jupiter Hostel             |                |
| 2     | sauma   | Undergarment , Brand - , Model - Color -              |                  | Mecury Hostel              | roy@gmail.com  |
| 3     | dante   | Camera , Brand - Panasonic, Model - Color -           |                  | Venus Hostel               | a@a.com        |
| 4     | haha    | Undergarment , Brand - Rupa, Model - Color - Red      | stinky           | Research and Computer Labs | b@b.com        |
| 5     | hoohoo  | Computers/Tablets , Brand - Asus, Model - Color -     |                  | Main Cafeteria             | c@c.com        |

### List of Lost Items Reported

| S.No. | Name           | Item Lost  | Item Description | Location               | Contact E-mail           |
|-------|----------------|--|------------------|------------------------|--------------------------|
| 1     | Eeshaan Sharma | , Brand - , Model - Color -                              |                  | Neptune Hostel         | eeshaansharma@gmail.com  |
| 2     | Uneet Patel    | Camera , Brand - Panasonic, Model - GTX56 Color - Yellow |                  | Mecury Hostel          | 2015csb1038@iitrpr.ac.in |
| 3     | roy            | Camera , Brand - Panasonic, Model - Color -              |                  | Venus Hostel           | roy@gmail.com            |
| 4     | manas          | Undergarment , Brand - Jockey, Model - Color -           |                  | Mecury Hostel          | manas@gmail.com          |
| 5     | jatin          | Pendrive , Brand - Sony, Model - Color -                 |                  | Playground or SAC Area | jatin@gmail.com          |

## 1. To Report a Lost Item:

Click on the “Report Lost” button in the navigation bar. The user will be directed to the “Report Lost Item Form”. In this form user will fill the required attributes marked with asterisk and after pressing submit button their complaint will be recorded and a Lost Id for future reference will be generated.

### Report a Lost Item

Please fill all the texts in the fields.

Name :

Entry Number :

E-mail :

Date Item was Lost :

Last Seen Location :

Specific Location Description :

Category :

Sub-Cateogry :

Brand :

Model :

Brief Description :

Color :

SUBMIT

## 2. To Report a Found Item:

Click on the “Report Found” button in the navigation bar. The user will be directed to the “Report Found Item Form”. In this form user will fill the required attributes and after pressing submit button their request will be recorded.

### Report a Found Item

Please fill all the texts in the fields.

**Name :**

**Entry Number :**

**E-mail :**

**Date Item was Found :**

**Found Location :**

**Specific Location Description :**

**Category :**

**Sub-Cateogry :**

**Brand :**

**Model :**

**Brief Description :**

**Color :**

### 3. To check status of reported Lost Item:

The user needs to enter reference id provided by LOST & FOUND at the time of reporting of the lost item. The reference id will be displayed at the homepage of the user when he logs in. When the user enters the reference id the status of the corresponding item will be displayed.

Enter Lost Item Reference Number

SUBMIT

After entering the provided reference number the user will see a list of items from our found database that match the description of the item lost.:

You have reported as Lost the following Item -

| Item   | Item Description | Last Seen Location | Date Item was Lost |
|--------|------------------|--------------------|--------------------|
| Camera |                  | Mecury Hostel      | 2017-03-09         |

From Our Database We Have Found the following Items -

| Name    | Item Category | Item Description | Found Location | Contact E-mail |
|---------|---------------|------------------|----------------|----------------|
| Srinadh | Camera        |                  | Jupiter Hostel |                |
| dante   | Camera        |                  | Venus Hostel   | a@a.com        |



## 4. Contact Us:

Click on “Contact Us” Button on top right corner. You will be directed to contact us page. Through this page the user can reach out to the LOST & FOUND team.

## 5. Feedback:

Click on “Report bugs” button on top right corner. The user will be directed to a google form where the user can give us feedback about our website and report bugs if any.

## 6. Logout:

Click on “Logout” button into the navigation bar. The user will be logged out of his current session and directed to our login page.

# IMPLEMENTATION DETAILS

Implementation of the project required work at the backend side and involved the creation of mysql tables for the following -

- To store the Registered Users.
- To store the list of Lost Items Reported.
- To store the list of Found Items Reported.

## LOGIN SYSTEM

To keep track of the users registered with us and handling their login details, all registered users have their credentials stored with us in the login table.

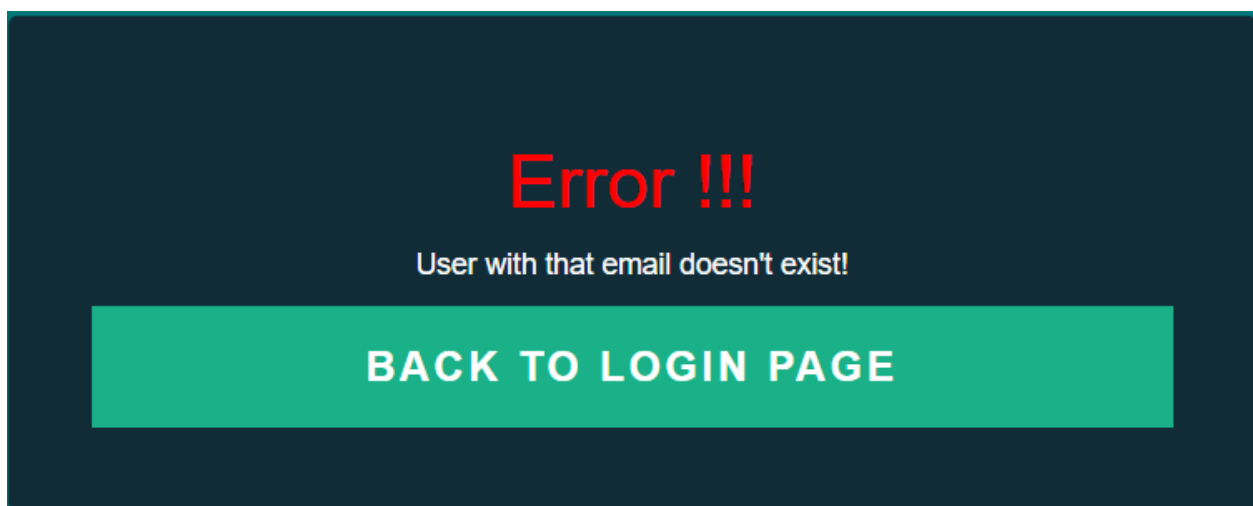
| Options                  |  |    |            |           |            |          |                          |   |                                   |
|--------------------------|--|----|------------|-----------|------------|----------|--------------------------|---|-----------------------------------|
|                          |  | id | first_name | last_name | email      | password | hash                     |   |                                   |
| <input type="checkbox"/> |  |    |            | 1         | Eeshaan    | Sharma   | eeshaansharma@gmail.com  | \$2y\$10\$SvTERic7rmla0V5sHzXYW00UEZjRdHcUFO5GOJ91CPg...  | 2ab56412b1163ee131e1246da0955bd1  |
| <input type="checkbox"/> |  |    |            | 3         | Uneet      | Patel    | uneetpatel2149@gmail.com | \$2y\$10\$GZVAXJke.pAC6zVTYg8xB0AvHHKsA9xr309p2PY8gV...   | d645920e395fedad7bbbed0eca3fe2e0  |
| <input type="checkbox"/> |  |    |            | 4         | srinadh    | k        | srinadhu1998@gmail.com   | \$2y\$10\$R5COsKH.ak1f7A1F0q1RpePIJGP03n5Zl37sux7m/2e...  | 559cb990c9dfdf8675f6bc2186971dc2  |
| <input type="checkbox"/> |  |    |            | 6         | hthth      | httttht  | thhyjy@gmail.com         | \$2y\$10\$v7NNpq7hrOoJsuQej4fZVuueQWRD./SSrZ3oykU.mPD...  | 37693cfc748049e45d87b8c7d8b9aacd  |
| <input type="checkbox"/> |  |    |            | 7         | Soumyadeep | Roy      | 2015csb1035@iitpr.ac.in  | \$2y\$10\$8Kob.9LpAYCf11PtqKy2jeRdm3leVHg.qVEY6ybRQBC...  | 48ab2f9b45957ab574cf005eb8a76760  |
| <input type="checkbox"/> |  |    |            | 8         | Unit       | Patel    | 2015csb1038@iitpr.ac.in  | \$2y\$10\$Nz/lq4Xj4BciSr3/F572hOcvZVG0JGRwDaXGQnyvV8a...  | 22fb0cee7e1f3bde58293de743871417  |
| <input type="checkbox"/> |  |    |            | 9         | test1      | test2    | test@test.test           | \$2y\$10\$OBNIH5vzZWICAKUllGqFGeOt.yb8kPjgutt07cPrV.O...  | 2050e03ca119580f74cca14cc6e97462  |
| <input type="checkbox"/> |  |    |            | 10        | cdfsdf     | ffdsfd   | nsv@gmail.com            | \$2y\$10\$SxnmtpEvgJVIWSIVgFVxZPeFfNOUwUdo3FBTTgErJQSz... | 5b8add2a5d98b1a652ea7fd72d942dac  |
| <input type="checkbox"/> |  |    |            | 11        | aa         | a        | aa@gha.com               | \$2y\$10\$Jv2yOY8GJbqxYoAl8H/n5.eipB2at46XwwR16.iHRIZ...  | c2626d850c80ea07e7511bbae4c76f4b  |
| <input type="checkbox"/> |  |    |            | 12        | Katta      | khatta   | khatta@gmail.com         | \$2y\$10\$GLorHxA9IsEomNYxyUaPYOXYQ5Bdt.qLSQNYVOcLr...    | 06138bc5af6023646ede0e1f7c1eac75  |
| <input type="checkbox"/> |  |    |            | 13        | Mukesh     | Saini    | mukesh@gmail.com         | \$2y\$10\$WNBmyn49Yrk5rIODlnYsZ.cV8BdcNfeNeBjEGJZa/2T...  | 7a614fd06c325499f1680b9896beedeab |
| <input type="checkbox"/> |  |    |            | 14        | Adata      | Singh    | adatasingh@gmail.com     | \$2y\$10\$PN1SeAzN8aLoQ.N03da0H.8Af3FA/pYNhjbP9ly1ZeQ...  | d93ed5b6db83be78efb0d05ae420158e  |
| <input type="checkbox"/> |  |    |            | 15        | Eeshaan    | Sharma   | 2015csb1011@iitpr.ac.in  | \$2y\$10\$PrWMzGVnheO7lgP9IO6EquBkX3jZAxYgoFp8Ocpiq...    | 1905aedab9bf2477edc068a355bba31a  |
| <input type="checkbox"/> |  |    |            | 16        | hey        | p        | hey@hi.com               | \$2y\$10\$CINM0cVYENic.8Q4g0FB2.dWASszi1gVPZkzKajxd3F...  | f718499c1c8cef6730f9fd03c8125cab  |
| <input type="checkbox"/> |  |    |            | 17        | Uneet      | Patel    | unit.patel@yahoo.com     | \$2y\$10\$hwY0gf0tcXJ/J0foUrw0P/gah1RCaIrhlpR7AQgHL...    | 07563a3fe3bbe7e3ba84431ad9d055af  |

As can be seen from the screenshot, high level of security is provided by storing the password in encrypted format. Along with the password a hash value computed by md5 in-built function is also stored.

The login system implemented is powerful enough to handle erroneous cases such as -

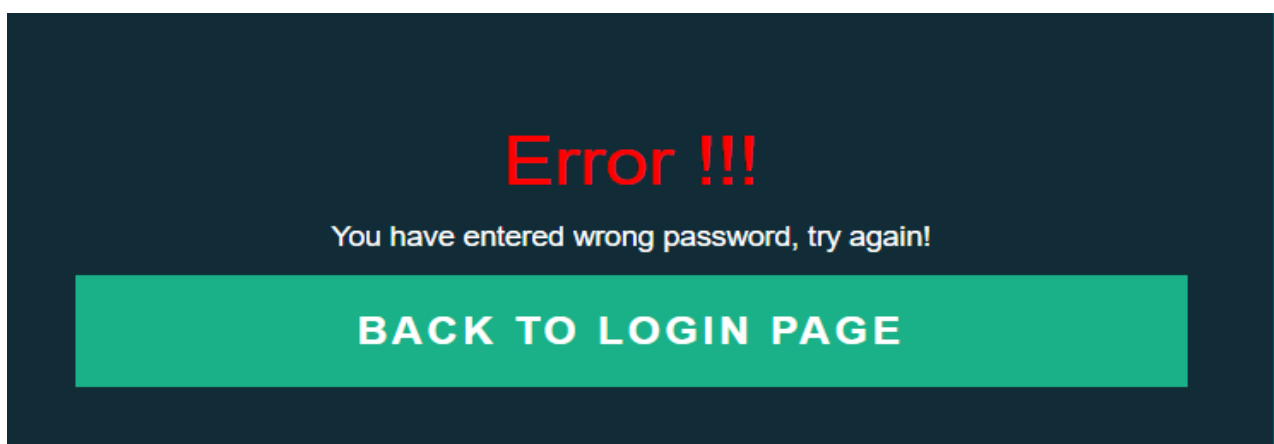
### 1. Invalid User Logging In :

If a user who does not have an entry corresponding to his credentials in the registered users table tries to login, the following error message is displayed -



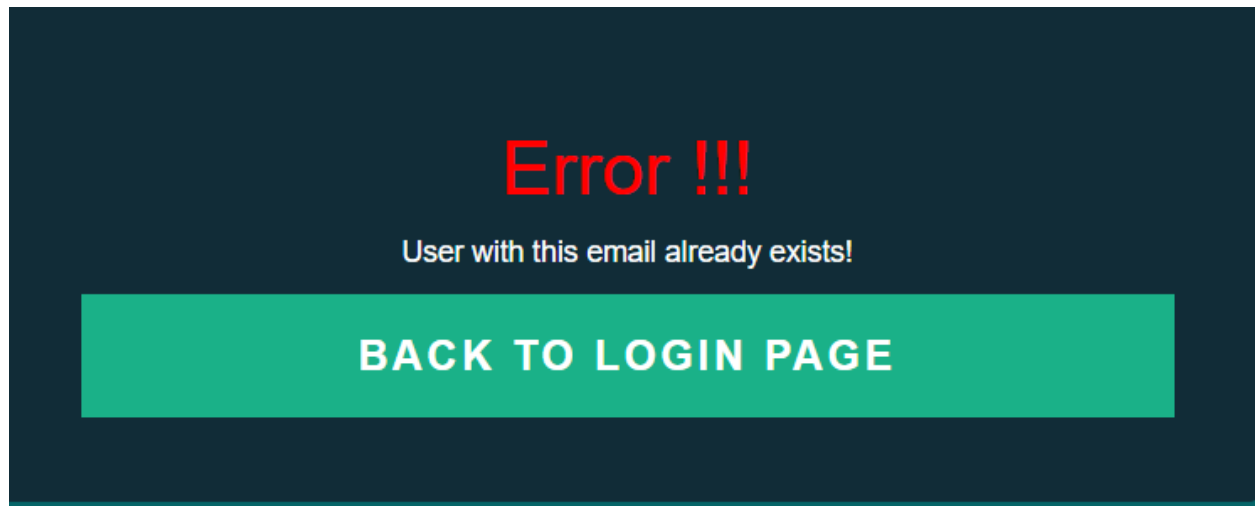
### 2. Entering Wrong Password :

If a registered user enters wrong password, the following error message is displayed -



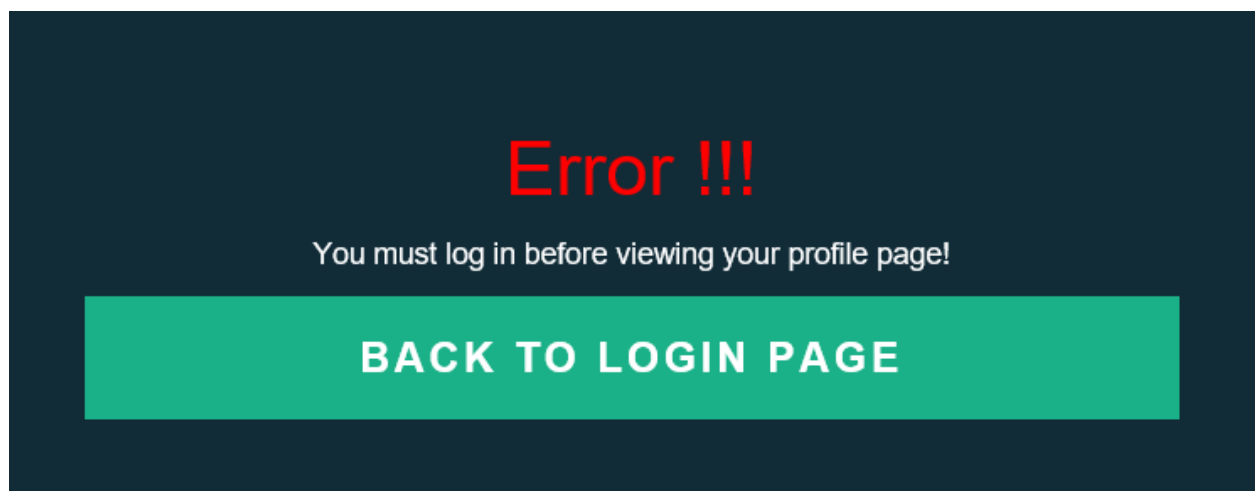
### 3. User Already Registered :

If an already registered user tries to sign up again with same E-mail Id, then the following error message is displayed -



### 4. User trying to directly access the homepage without Logging In :

If a user tries to directly open the link 10.1.1.19/~2015csb1011/Lost/target.php, without logging in, then the following error message is displayed -



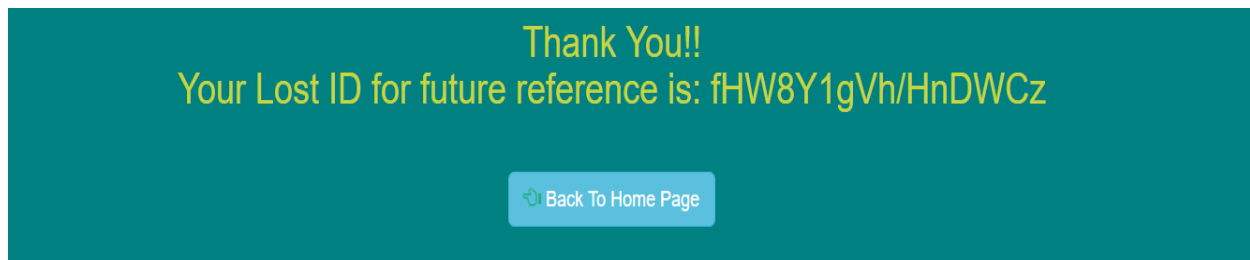
**NOTE** - Additional features such as Forgot Password and E-mail Verification could not be implemented as mail function was not working properly.

## REGISTERING LOST & FOUND ITEMS

### Storing Lost Items:

For a user to report a lost item, he/she can access a lost form provided he/she is a registered user and is logged in presently. In the form the mandatory fields are shown with an asterisk beside them.

When form is filled successfully a unique reference id is generated in the following manner



The unique reference id is generated using the md5 function and takes into account all the parameters filled by the user in order to generate a unique number. This reference id will be used for all future requests of verifying status of the lost item.

After successfully filling the form the item along with its reference id will be stored in the Lost Items table.

|  |  |  |    |                |          |                          |  |                                  |   |
|--|--|--|----|----------------|----------|--------------------------|--|----------------------------------|---|
|  |  |  | 43 | Teja           | Allu     | 2015csb1005@iitpr.ac.in  | \$2y\$10\$GLn0BkMa gvrC7XM9KH8g I/SPBcbVd77OORVJg9 S0... | 210f760a89db30aa72ca258a3483cc7f | 0 |
|  |  |  | 44 | XYZ            | ABC      | xyz@hotmail.com          | \$2y\$10\$RgclBhRgCjm2WjraulRSOeneYQc5jzu3z/ZW2TgvPBA... | 03c6b06952c750899bb03d998e631860 | 0 |
|  |  |  | 45 | Vishal         | Singh    | 2015csb1040@iitpr.ac.in  | \$2y\$10\$bWdu0U34Qre5FAlg2nXEuIBqq5mu9s7sVihf89tr...    | 2b24d495052a8ce66358eb576b8912c8 | 0 |
|  |  |  | 46 | Hum Shikhar Hu | Hum HUU  | jcn@gmail.com            | \$2y\$10\$fU4Jl5LQyzuQn0wIV daFOGmtFdxwQGmRrLdlyzk1o...  | be3159ad04564bfb90db9e32851ebf9c | 0 |
|  |  |  | 47 | unit           | chutiya  | unit@chutiya.com         | \$2y\$10\$Vf/K.8CTORRKRLuAQPidH.ng/uzpucCjAGDm/7EB.Xp... | 9cf1d8026a9018052c429cc4e56739b  | 0 |
|  |  |  | 48 | Manish         | Kumar    | 2015csb1019@iitpr.ac.in  | \$2y\$10\$qN5pLpHbdOIL5smS2T2oe1JON7z1MIZ8RMMgpt6C47...  | d1c38a09acc34845c6be3a127a5aacf  | 0 |
|  |  |  | 49 | Sainath        | Thota    | sai@gmail.com            | \$2y\$10\$Nri34zpE53tfnTR3wOmBu5c7nd7myVGHe/.kdWDrK...   | 0584ce565c824b7b7f50282d9a19945b | 0 |
|  |  |  | 50 | Dante          | Wada     | dantewada@gmail.com      | \$2y\$10\$llwKEk3N42YIWYto4mSOSoeLXnPIBUDWSv0BvcBv5IW... | c75b6f114c23a4d7ea11331e7c00e73c | 0 |
|  |  |  | 51 | Eeshaan        | Sharma   | eeshaan.sharma@gmail.com | \$2y\$10\$cpGkzXUCYRHMwcfY0c8AHOXfW0N9HRRG/pzL6LMi5M...  | 8e296a067a37563370ded05f5a3bf3ec | 0 |
|  |  |  | 52 | devsingh       | eslavath | 2015mcb1092@iitpr.ac.in  | \$2y\$10\$3eLE11b5.GSO6qF1jJQIR.TbtMXdL6YeVbkPfxGFIFY... | 68053af2923c00204c3ca7c6a3150cf7 | 0 |
|  |  |  | 53 | Alok           | Kiran    | alokkiran777@gmail.com   | \$2y\$10\$njYHO02JLgAp689MJVoGfOGwJjwfGqkZnm1wMskAGE0... | a733fa9b25f33689e2adbe72199f0e62 | 0 |
|  |  |  | 54 | Mukeesh        | Saini    | mukesh@iitpr.ac.in       | \$2y\$10\$JvTeumrmtZokI9je3ZkC1edH8XyIG7NfAV9g7UyzYP...  | aa942ab2bfa6ebda4840e7360ce6e7ef | 0 |
|  |  |  | 55 | 12345          | 09876    | kiklkl@as.com            | \$2y\$10\$Uei9dzPjocptSGK1hllcIOTCOzA2zEhg2hvJl6gM...    | 4b0250793549726d5c1ea3906726ebfe | 0 |
|  |  |  | 56 | Koustav        | Das      | 2015csb1017@iitpr.ac.in  | \$2y\$10\$V24GnzNb2.LvB.t4QPyQNutlmMZb7rTHSsrK2bo6gm5... | e4bb4c5173c2ce17fd8fcd40041c068f | 0 |
|  |  |  | 57 | harshita       | modi     | harshita@gmail.com       | \$2y\$10\$QRkzR64X5iOhdZsseM5kV.LyOp6s1PhlcrQncrbs0j...  | eb163727917cbb1a1ea208541a643e74 | 0 |
|  |  |  | 58 | pawan          | Jha      | 2014eeb1064@iitpr.ac.in  | \$2y\$10\$gSKUvIXHmUVZJLgKsLssquxVaoY/LENRWZ7J/0Pp6S...  | a760880003e7ddedf56ac3b09697f    | 0 |

### Storing Found Items:

For a user to report a found item, he/she can access a lost form provided he/she is a registered user and is logged in presently. In the form the mandatory fields are shown with an asterisk beside them.

After successfully filling the form the item is stored in the Found Items table.

|   | S_No | Name       | EntryNumber | Email                       | Date       | Location                    | Location_desc  | Category             | SubCategory        | Brand      | Model     | Item_desc                               | Color  |
|---|------|------------|-------------|-----------------------------|------------|-----------------------------|----------------|----------------------|--------------------|------------|-----------|---|--------|
|    | 30   | Roy        | 2015csb1035 | 2015csb1035@iitpr.ac.in     | 2017-04-15 | Research and Computer Labs  | Lab 1          | Personal Accessories | Chains/Necklaces   |            |           | Gold chain very costly one.             | Yellow |
|    | 32   | Anil       | 2015eeb1046 | 2015eeb1046@iitpr.ac.in     | 2017-04-24 | Jupiter Hostel              | Near water tap | Electronics          | Cellular Phone     | iPhone     | s6        | white one                               | White  |
|    | 34   | Itachi     | 2015meb1097 | itachi.uchiha687x@gmail.com | 2017-04-30 | Jupiter Hostel              |                | Clothing             | Hat                | Goorin     |           |   | Yellow |
|    | 35   | unit       | 2015csb1037 | unit@gmail.com              | 2017-04-13 | Jupiter Hostel              |                | Electronics          | Cellular Phone     | iPhone     | s6        |   | White  |
|    | 37   | Shivam     | Mittal      | 2015csb1032@iitpr.ac.in     | 2017-03-26 | Jupiter Hostel              | Venus          | Clothing             | Jeans/Pants        | Lee        |           |   | Blue   |
|    | 38   | Anil       | 2015eeb1046 | 2015eeb1046@iitpr.ac.in     | 2017-04-24 | Mercury Hostel              |                | Clothing             | Jeans/Pants        | Armani     |           | blue color jeans.                       | Blue   |
|    | 40   | srinadh    | 2015csb1015 | srinadhu1998@gmail.com      | 2017-04-24 | Neptune Hostel              |                | Sporting Goods       | Shoes              | Adidas     |           | size 11 black color one with red shades | Black  |
|    | 41   | Devsingh   | 2015meb1089 | 2015meb1089@gmail.com       | 2017-04-24 | Research and Computer Labs  | lab.2          | Clothing             | Sweater/Sweatshirt | Adidas     |           | sweater                                 | Grey   |
|    | 42   | Eeshaan    | 2015csb1011 | 2015csb1011@iitpr.ac.in     | 2017-04-05 | Jupiter Hostel              |                | Clothing             | Shirt/T-shirt      | Adidas     |           |   | Grey   |
|    | 43   | srinadh    | 2015csb1015 | 2015csb1015@iitpr.ac.in     | 2017-04-24 | Lecture or Conference Halls |                | Literature           | Notebooks          |            | classmate | some mal213 course book.                | Black  |
|    | 44   | Unit Patel | 2015csb1038 | 2015csb1038@iitpr.ac.in     | 2017-04-11 | Jupiter Hostel              |                | Clothing             | Shirt/T-shirt      | Adidas     |           |   | Red    |
|    | 45   | Adata      | 2000        | adatasingh@gmail.com        | 2017-04-10 | Research and Computer Labs  |                | Sporting Goods       | Jersey             | Shivnaresh | Y0Y       | Brand new!                              | Violet |
|    | 46   | asdfsdf    | asdfsdf     | asdfa@as.com                | 2017-05-16 | Mercury Hostel Cafeteria    | asdfsdf        | Clothing             | Shirt/T-shirt      | Others     | asdfsdf   | sdfsdfasf                               | Others |

## CHECKING STATUS

To know about the status of the Lost Item, the user would have to enter the Lost Id Reference Number provided after successful submission of the form.

For simplicity of remembering the lost id, when a user who has reported a Lost Item logs in again, the details of his previous reports about losing an item along with the reference number for each item will be displayed on his Homepage.

Welcome  
Soumyadeep Roy

You have reported as Lost the following Item -

| Item   | Item Description   | Reference Number |
|--------|--|------------------|
| Racket | tennis racquet large one.black threads and white handle. | I9nLQcIXK1uipDwb |

The reference number will be matched with all the items reported as lost and based on the searching algorithm (explained below) all items, matching the lost item, from the Found Items table will be displayed along with the contact of the person who has found it.

You have reported as Lost the following Item -

| Item           | Item Description                           | Last Seen Location | Date Item was Lost |
|----------------|--|--------------------|--------------------|
| Cellular Phone | white one with lord of rings phone case... | Mercury Hostel     | 2017-04-25         |

From Our Database We Have Found the following Items -

| Name | Item Category  | Item Description | Found Location | Contact E-mail          |
|------|----------------|------------------|----------------|-------------------------|
| Anil | Cellular Phone | white one        | Jupiter Hostel | 2015eeb1046@iitpr.ac.in |
| unit | Cellular Phone |                  | Jupiter Hostel | unit@gmail.com          |

## SEARCH ALGORITHM

The forms have been made descriptive enough to assist us in performing searching and matching a person who has lost an item to a person who has found one. The matching works in the following manner - When someone enters a status to be checked then from the table we take the column with the provided reference id. If no such reference id is present then an error is generated, otherwise the reported item is matched with all the items in found table with the same category. All item categories except 'personal accessories' category will match the subcategory and brand and then report all the valid matches.

The person can then set up a meeting with the potential finders as we are displaying his/her e-mail id. For the 'personal accessories' category only sub category is verified and the matches are reported as before.

## CONCLUSION

Implementation of the Project under Software System's Laboratory Course has enabled us to find an optimized solution to a simple yet unexplored problem. A centralized portal for reporting Lost & Found Items helps significantly in countering the tormenting experience that one has to go through after losing an item of everyday use. It was a great experience for our Group to design a Lost & Found Portal and we hope that it will be an even better experience for the users.