Entry Management Application Documentation

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We chose to build a flask application for the given requirements and we also made few improvements to the requirements given.

Organisation of the documentation:
1. **Requirements**
2. **How to run the application**
3. **Features**
4. **Improvements made**
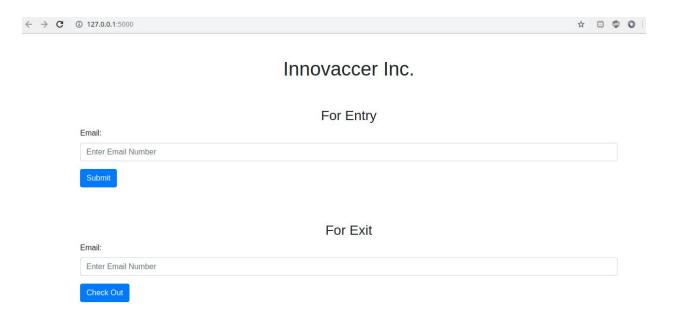
1. Requirements & how to run the application(Linux)

Download the ZIP file and extract it.
>> # Enter the following commands inside the project directory
>> # install python (not required for linux users)
>> sudo apt install python-pip   # (install pip)
>> sudo apt install virtualenv   # (install virtualenv)
>> virtualenv subhash   # (create a virtualenv)
>> source subhash/bin/activate # (activate the virtualenv)
>> # Now install requirements from the given requirements.txt file
>> pip install -r requirements.txt
>> # Now you are all ready to start the application
>> python app.py

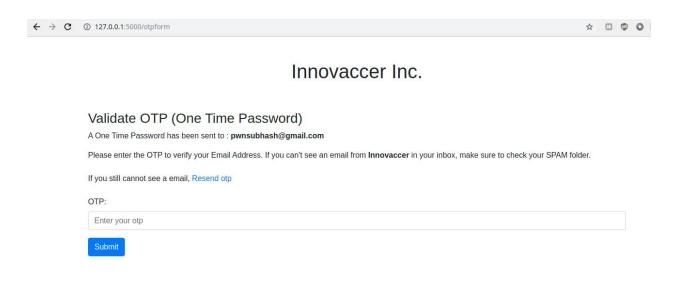Now open browser and enter http://127.0.0.1:5000/

2. Guide for using

After entering the url you will get a home page displayed with two forms And the above page we can see two forms. The first form need to be filled if the visitor needs to enter the office. We will first see about the entry process and later see about the checkout process.

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For Entry

Email:

Enter Email Number

Submit

For Exit

Email:

Enter Email Number

Check Out

Guide for entry process

For beginning the entry process the visitor needs to enter his email in the first form and submit it. Then OTP is send to the visitors email to verify is authenticity. And then the visitor is redirected to the below page.

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Validate OTP (One Time Password)

A One Time Password has been sent to : **pwnsubhash@gmail.com**

Please enter the OTP to verify your Email Address. If you can't see an email from **Innovaccer** in your inbox, make sure to check your SPAM folder.

If you still cannot see a email, Resend otp

OTP:

Enter your otp

Submit

In this page the visitor needs to enter the OTP sent to his mail for authentication. There are three possibilities from here.

Case 1) Visitor enters a wrong OTP
Case 2) Visitor didn't gets an OTP, so he can click resend OTP to get the OTP again.
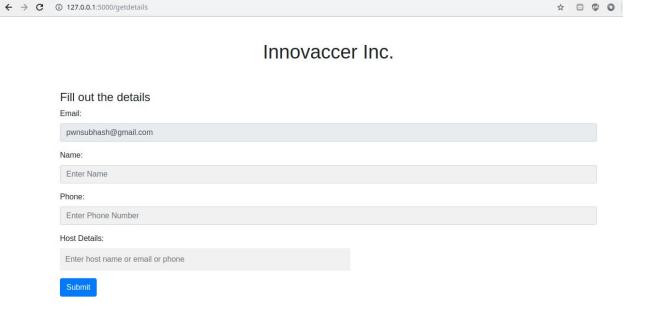Case 3) Visitor enters a correct OTP

Outputs of each case:
In case 1) We display a message saying the otp is wrong and ask the user to try again.
In case 2) We generate a new otp and replace it with old otp in the database and send an email with new otp, and ask the user to try again.
In case 3) If the visitor enters correct otp, it is validated and the below page is rendered.

The below page consists of a form requesting
   1) Visitor name
   2) Phone
   3) Host details he wants to meet.

← → C ⓘ 127.0.0.1:5000/getdetails   ☆ ▢ ◉ ○

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Fill out the details

Email:

pwnsubhash@gmail.com

Name:

Enter Name

Phone:

Enter Phone Number

Host Details:

Enter host name or email or phone

Submit

Before rendering the above page we check whether the visitor has past visit records with us, if yes then we will auto fill his details, making his work easy. Here by auto filling his details we do not want to restrict visitors using different names at different times, but yet visitors can change their phone number. We allow him to change his mobile number if he wants to. if there are no past records of the visitor exist, we simply render the page.

Here we have done extra efforts to help visitors in choosing the host details. We have a database of hosts, with host name, phone and email details. (If you want to add a new host, find host.txt file and add host details at the end of the file and execute (>> python savetexttodb.py) in terminal). After a lot of efforts we are able to add **auto complete** feature for host details, visitor can search host based on phone, email and name of the host.

So after submitting this form, the host is notified with a mail containing visitor details along with accept and reject links. Till the host doesn't give any confirmation the visitor has to wait until the permission is granted. (This permission feature is implemented as we thougth that we should not allow visitor into the office with out anybody taking responsibiity of him, now with the grant permission feature we can make sure that, the host who accepts the entry into the office must be the sole responsibility for anything visitor does).

Now if the host clicks accept link, permission is granted to enter the office and a mail is sent to the visitor mentioning the same. If the permission is rejected, the same is sent to the visitor.

Guide for checkout process

In the home page, the second form is for check out process. The visitor for checking out must enter his email id, then is check out time is stored and a mail is sent to the visitor mentioning about his visit details.

Notable Features

1) Host auto complete feature which allows any input it may be name email or phone of the host.
2) Almost all corner cases are covered in this.
3) Added OTP based authentication of visitor to make sure that he is genuine.
4) Auto fill of visitor details saving his time.
5) Email based notifications for OTP, Notifying host for Permissions, notifying visitor incase of acceptance or rejection of his request, sending summary of his visit after checkout.