# User Guide - Web Application

## **Prerequisites**

1. Python 3.7.5
2. MYSQL Server
3. MYSQL Workbench
4. pip3 install requirements.txt
5. Install the prerequisites of chain\_dev
6. Execute the "forensic\_blockchain.sql" file in MySQL Workbench and it will create 2 different tables (account & bitcase)
7. Change/modify the settings as shown in the app.py file accordingly. We have set up a cloud server as the mobile app needs to be able to interface to the web application and the blockchain.

Text

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## **How to run**

You can run the web application by running this command “python3.7 app.py” and to access the URL as shown below respectively.

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## **Features of the web application**

This section describes all the respective pages in the web application as well as the functionalities.

**/register**Graphical user interface, application, website

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You will first need to register for an account before being authorized to access the web application. Upon successful registration, it will send a verification email to your email address which you will need to verify before being able to use it.

Graphical user interface, text, application, email

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**/forgotpassword** Graphical user interface

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This page allows the investigator to reset their password if they forget their password by entering their email.

If the account/email is valid, the investigator should be able to receive the following email to reset their password.A picture containing graphical user interface

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The investigator then can reset his/her password by entering a new password and it will direct him to the login page if there is no error. Graphical user interface, application

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**/Index**Graphical user interface, application

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This is the login page where the investigator can access the web application with the correct credentials.

**/Home (Logged in with admin account)**Graphical user interface, application

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This is the dashboard page where it outputs the name of the investigator, role/privileges that the investigator has, number of cases the user has and the latest 5 transactions to the blockchain such as any new statusChanged or evidenceAdded.

**/Home (Logged in with member account)**Graphical user interface, application

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When logged in with a higher privilege account(admin), you will be able to see the latest 5 transactions to the blockchain for all the cases. However, with a lower privilege account, you will only be able to see the latest 5 transactions to the blockchain for the cases that you oversee. This explains the reason for the empty table as the user does not have any cases.

**/Profile** Graphical user interface, application

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On the profile page, the investigator can only view their account details such as username, email & role.

Graphical user interface, application

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Investigators can choose to edit the account details such as changing the username, password & email.

**/Case**Graphical user interface, application, email

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Investigators can view all the case details that they are assigned to such as the case ID, case name, date, assigned\_to, location, status, and evidence. To view the evidence of each case, the investigator would have to click the view button.

**/Show\_Case**Background pattern

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Upon clicking the view evidence button, the show\_case page shows a list of evidence that the case contains such as the handler, location, Image\_Hash, Evidence Type, Serial Number, Model, Status, Purpose, Notes, Time.

Graphical user interface, text, application, email

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To view the check-in/check-out history of the evidence, we can click “show evidence history” where gives us the evidence timeline.

Graphical user interface, text, application, email

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**/Case\_Add**Graphical user interface, application

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Investigator can create a new case and it will be populated to the database.

**/Admin** Graphical user interface, text, application, email

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Investigators can only access the admin portal if their account role is set to “admin”. The first page of the admin portal allows the investigator to view all the account details registered in the web application.

**/Admin/account**Graphical user interface, text, application, email

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The second page of the admin portal allows the investigator to add new accounts.

**/Admin/case**Graphical user interface, application

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The third page of the admin portal allows the investigator to view & edit all case details including those that are not owned by the admin.

**/Admin/edit\_case**Graphical user interface, text, application

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**/Admin/evidence**Table

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The last page of the admin portal allows the investigator to view all the transaction details/activity in the blockchain as shown in the image.