uWatch Demo4 Manual

Mphetamines - September 24, 2015



1.0 General Information

The system is a digital forensic tool developed by students at the University of Pretoria in affiliation with SAPS and ICSA(mrs mammal and prof H.Venter).

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1.1 System OverView

uWatch is an application, which allows members of the community to digitally capture evidence of crimes being committed and sending the potential evidence as a form of digital data to the police to be used in the court of law for convictions, the Application provides users with an option to capture images, audio and video files and uploads those files to local server—which will then be viewed by the law enforcement at a later stage.

1.2 Organization of the Manual

The user's manual consist of four sections: General information, System Summary, Getting started , and Using the System.

General information section explains in general terms the system and the purpose for which it is intended.

System summary section provides a general overview of the system. The summary outlines the uses of the system's hardware and software requirements, system configuration, users access levels and system

behavior and contingencies.

Using the system section provides a detailed description of systems functions

2.0 System summary

2.1 System Configuration

uWatch operates on mobile devices with android and iOS operating system, it is so far compatible with most versions of android and iOS smart phones. The application requires internet connection to send the captured media to the local server and in turn to the database, it requires internal GPS receiver to obtain the coordinated of the users for geolocation and timestamps and internal camera to take photos and videos along with an audio tool. data saved in the local server can be seen by the logged in user on the application's view PDE section and on any internet browser. after installation of the application on your device, uWatch can be used immediately after signing up with no further configurations.

2.2 User Access Levels

Everyone who has the application installed can use the application but only registered, logged in users can store the data onto the local server.

2.3 Contingencies

Data is never stored in the user's device internal memory, the application allow the user to check for an internet connection first prior to uploading media to the local server, in case there is no internet connection, a user can not upload to the server and in case the battery is low while the user is busy capturing the potential evidence, the application saves the data immediately and switches the application off.

3.0 Getting Started

3.1 Installation and Logging in

The newest installation version currently available can be downloaded from our Github repository https://github.com/MPHETamines/MPHETamines, you will need to locate the .apk file, which should be installed on your device. The software will also

be available on all platforms app markets available for download. This includes IOs, Android and Windows mobile. To install one would just need to search the app market for uWatch and select install then accept the agreements. After this the application will be installed to the device, before a user can use the application they must first create an account and start capturing.

3.2 System Menu

uWatch is a Tabbed application, which consist of 3 tabs (Figure 1). The first tab is the capture tab which takes the user to a page that allows them to capture the media they desire and the second tab is the view PDE tab which allows the user to view all the files they have uploaded into the local server and the last one is the login/signup tab where a user can log into the application.



Figure 1. Tabs of uWatch

3.2.1 Capture PDe

The Capture PDe section (figure 2)consists of five buttons which allows the user to choose what action to perform, a user can either capture an image, capture a video, record and audio, check location and connection.

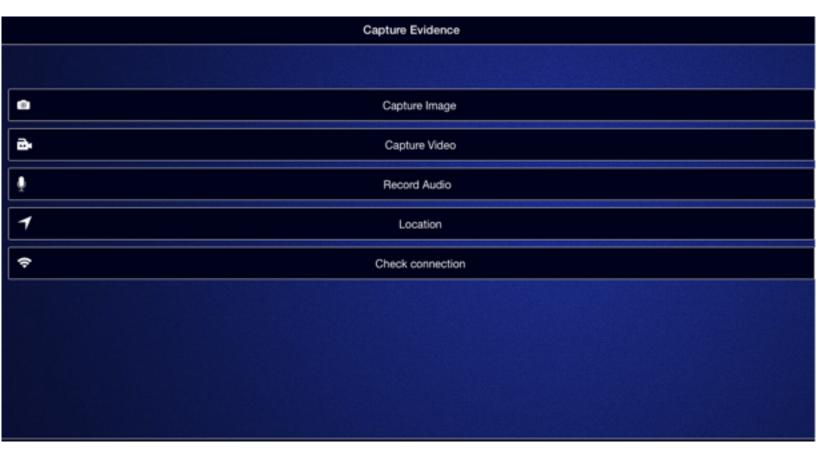


Figure 2. Capture Tab

3.2.2 view PDE/Profile

The View PDe section (figure 3) allows a user to view all the files they have uploaded along with their own details that are stored in the database.

(ie the current screen shot does not show any files from the database because no user was logged in at the time it was taken.)

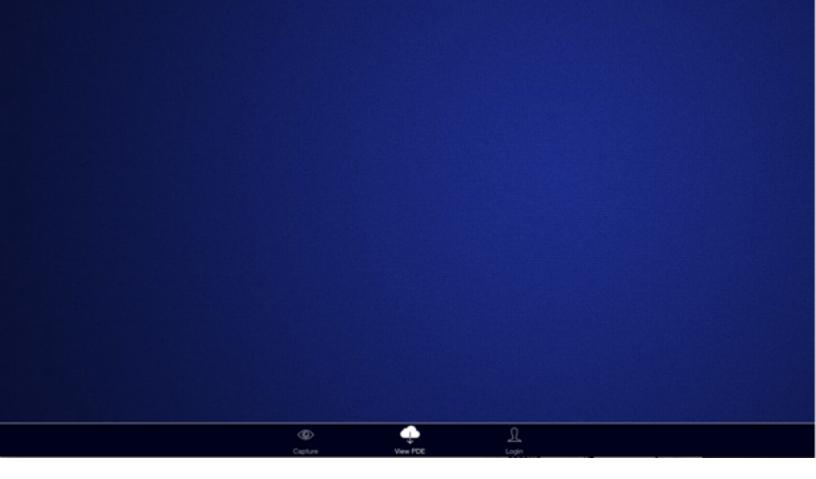


Figure 3. View Tab

3.2.2 Login/SignUp

The View PDe section (figure4) allows a user to login to the application and if the user has not logged in, to register (figure 5)as a new user to the application, the login tab requires the users email and password and the signup tab requires the users name, surname, email, phone number and password to be stored into the database, once the user has successfully added all these details and clicked register, they will receive and email asking for their one time password before they can proceed.

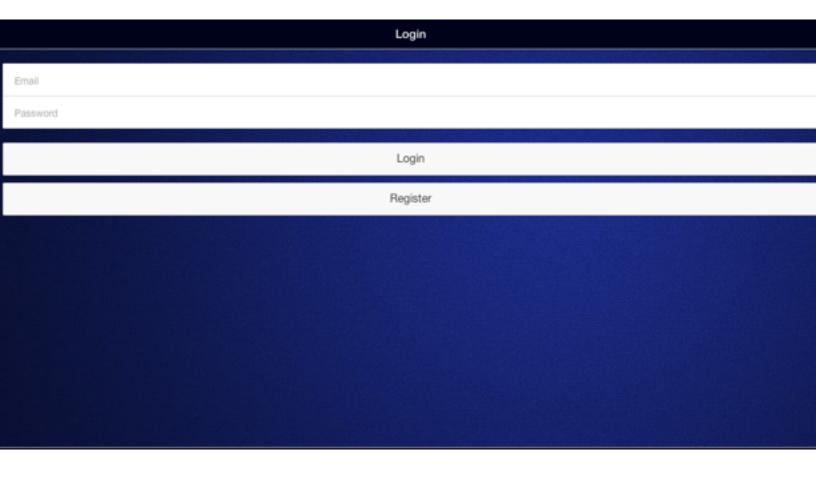
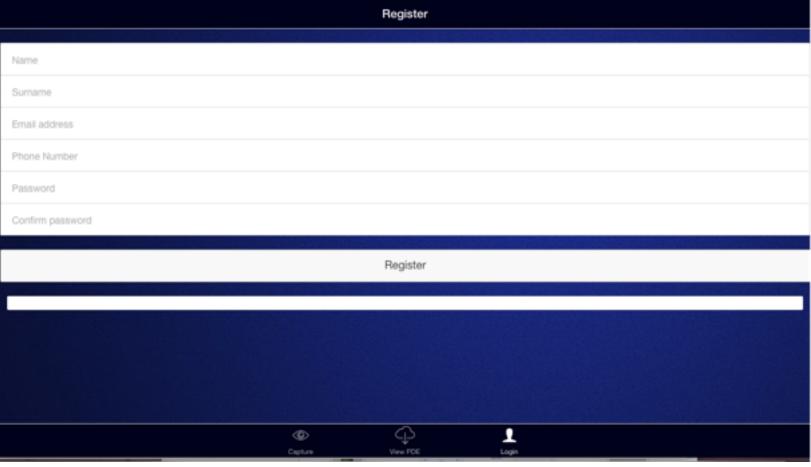


Figure 4. Login tab



3.3 Exit System

uWatch can be exited using the logout option on the device.

4.0 Using the System

4.1 SignUp

For a user to user the system, They have to sign up to the application, the application tab has six input boxes where the user is required to add their personal details corresponding to each place holder, once a user has signed in and does not already have an account with uWatch they will have to confirm that their details are correct, a one time pin will be sent to the user's email and the user will use that pin to access the entire functionality of the app, other wise the user cannot capture any evidence.

4.2 Login

If a user has not logged out, then they will remain logged in and can continue to use the application as they please. if a user has recently logged out and wants to log in they are presented with two input boxes requesting the users email and password which will simply log them in if the details are correct and the user has registered to the system.

4.3 Capture PDE

when a user has successfully logged in they are redirected to a tab where they are faced with all the options they can perform using the application, they can capture an image, take a video or make an audio recording, they can also check their location and internet connection with a click of a button. after a user has captured the PDE they are asked if they want to upload the media file or discard it, they can then confirm receiving a success notification or discard the upload and be sent back to main menu.

4.5 View PDE/Profile

when a user is successfully logged in to the application they can view all the files they have uploaded by clicking on to the view PDE tab at the bottom or they can view their profile in the view Pde tab as well to check that the information they have entered is correct.

5.0 TroubleShooting

Some evidence may not pass the test of authenticity, to fix this one should make use of more features of the app, for instance the location setting should be switched on and the camera should take high quality photos and videos. There will also be a problem if ones internet connection is not available, so the user should make sure of a stable connection to the internet when using the application. Other than that one should not have to troubleshoot.