

# USER MANUAL iCrawler

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The 5 Concurrent Nodes

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### 1 Overview

iCrawler is a monitoring app available for Android only. The objective of the mobile monitoring application is to display and assist in understanding the activities performed by a mobile user as well as shedding more light into the behaviour of the mobile user. The mobile monitoring application generates reports giving the investigator quick and comprehensive data/logs. The app uses the device's internet connection to send the data logs collected from the phone to a desktop-dashboard for review. The app is absolutely free to download.

#### WHY USE iCRAWLER:

- Child monitoring iCrawler can be use by parents/guardians to monitor activities that their minor children get up to.
- Employee monitoring Companies that give their employees mobile devices can use the *iCrawler* to monitor any unauthorized activities that employees may get up to.

# 2 Configuration

| iCrawler            |   |  |  |  |
|---------------------|---|--|--|--|
| Stable release      | 1.0   |  |  |  |
| Development status  | Active  |  |  |  |
| Operating System    | Android 4.2+  |  |  |  |
| Platform            | Android   |  |  |  |
| Internet connection | Yes   |  |  |  |
| Available in        | English   |  |  |  |
| Type                | Monitoring App  |  |  |  |
| License             | Free  |  |  |  |
| Website             | www.github.com/u11241617/COS301-Mobile-Monitoring-App |  |  |  |

## 3 Installation

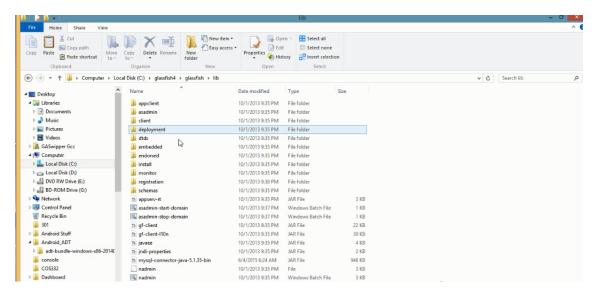
#### • App installation

Installation of the mobile iCrawler application is as follows. For the mobile iCrawler application all that is required is for the apk (Android Application Kit) file to be downloaded onto the device and installed. The user then needs to read the terms and conditions and register on the application or login if already registered.

#### • Server installation

iCrawler uses Java EE and glassfish 4 on the server side. Download and install MySql and xampp. Then download the glassfish 4 files. Once finished downloading and installing MySql and xampp download MySql connector and place it in the glassfish lib folder.

Figure 1: Download and add the MySql connector in the glassfish lib folder.



← → C n □ localhost:4848/common/index.jsf ☆ 💿 🗉 Home About... User: admin | Domain: domain1 | Server: localhost GlassFish™ Server Open Source Edition Common Tasks New JDBC Connection Pool (Step 1 of 2) Next Cancel \* Indicates required field General Settings Pool Name: \* MySQL

[java.sql.Driver

Must be specified if the datasource class implements more than 1 of the interface. Resource Type: Checycle Modules

Monitoring Data

Monitoring Data

Resources

Monitoring Data

Concurrent Resources

Monitoring Data

Monit Database Driver Vendor: MySql ¥ ☐ Enabled
If enabled, data source or driver implementation class names will enable introspection. Activate Windows
Go to PC settings to activate Windo Ps S ▲ 🎉 †[] ...|| ENG 3:19 PM

Figure 2: Create pool in glassfish localhost.

Home About...

Jser: admin Domain: domain1 Server: localhost GlassFish™ Server Open Source Edition Common Tasks Domain
Server (Admin Server)
Clusters
Standalone Instances
Nodes
Applications
Lifecycle Modules com.mysql.jdbc.Driver ▼ Select or enter vendor-specific classname that implements the java.sql.Driver interface. Ping: ed during creation or reconfiguration to identify and warn of any erroneous values for its attributes Description: Monitoring Data Pool Settings Initial and Minimum Pool Size: 

| Ocupations | Minimum and initial number of connections maintained in the pool Fesources
Fig. Concurrent Resources
Fig. Connectors
Fig. JDBC
Fig. JMS Resources
Fig. JNDI
Fig. JavaMail Sessions Maximum Pool Size: Connections
umber of connections that can be created to satisfy client requests Connections
 Number of connections to be removed when pool idle timeout expires Pool Resize Quantity: 300 Seconds

Maximum time that connection can remain idle in the pool Seconds Idle Timeout: Resource Adapter Configs Configurations

default-config

server-config 60000 Milliseconds
Amount of time caller waits before connection timeout is sent Max Wait Time: Update Tool Activate Windows
Go to PC settings to activate Windows Transaction Non Transactional Connections: Enabled Ps S

Figure 3: Create pool in glassfish localhost.

← ⇒ C fi localhost:4848/common/index.jsf ☆ 💿 🗉 GlassFish™ Server Open Source Edition Maximum Pool Size: 32 Connections

Maximum number of connections that can be created to satisfy client requests Common Tasks Domain
server (Admin Server)
Clusters
Standalone Instances
Nodes
Applications
Utfecycle Modules
Monitoring Data Pool Resize Quantity: Connections

Number of connections to be removed when pool idle timeout expires 300 Seconds

Maximum time that connection can remain idle in the pool Idle Timeout: Max Wait Time: 60000 Milliseconds
Amount of time caller waits before connection timeout is sent Chiecycle Modules
 Monitoring Data
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 Peacures
 Connectors
 JDBC
 JUNDI
 Javahall Sessions
 Resource Adapter Configs
 Configurations
 Modult-config
 Server-config Transaction If unspecified, use default level for JDBC Driver Isolation Level: 1 Description Update Tool Activate Windows
Go to PC settings to activ gs to activate Windows.

| Previous | Finish | Cancel | Ps

Figure 4: Create pool in glassfish localhost.

Figure 5: Setup glassfish in intellij project.

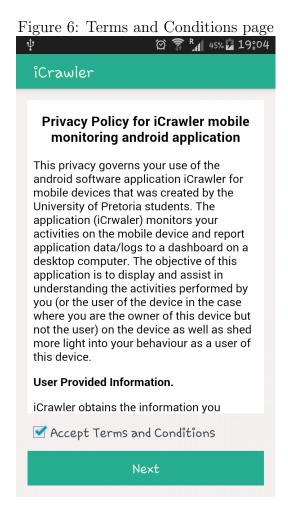
The files necessary to be installed on the server so that iCrawler can run can be retrieved from The 5 Concurrent Node Git-hub repository. The iCrawler application sends all its data/logs to a dashboard that is a xhtml website. The file necessary to run the dashboard can be downloaded from The 5 Concurrent Node Git-hub repository. The files need only be copy pasted onto the server. On access of the dashboard the user will be presented with a login page where the user will have to be registered on the iCrawler mobile application first before being able to login on the dashboard.

# 4 Getting Started

After successful installation, locate the iCrawler app icon and click on it to run the app.

#### • Terms and Conditions

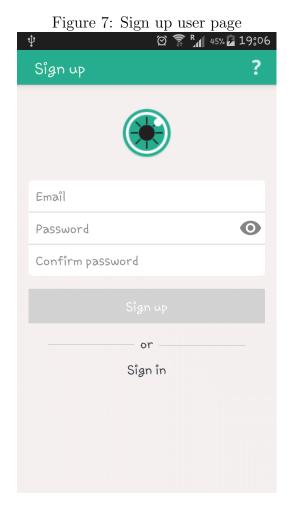
Before you can use iCrawler you need to read the 'Terms and Conditions' on startup and only after accepting them can you proceed, if you don't accept you can not use the app.



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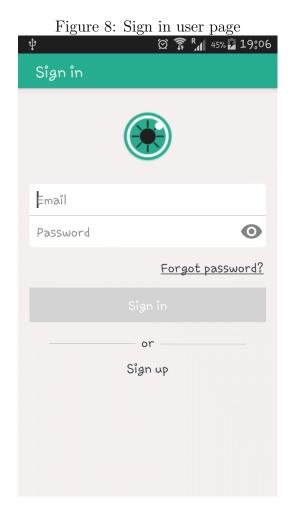
#### • Sign up new user

If you are a first time user you need to sign up after accepting the 'Terms and Conditions'. You need to provide a working *email address* and create a *password* you will use to sign in with in future. If you have an existing account, simply 'click Sign in' to go to the sign in page.



#### • Sign in as existing user

If you have used the iCrawler app before, you need not to sign up again, simply enter your credentials and then 'click Sign in' in order to subscribe the new device. If not, 'click Sign up' to register as a new user.



# 5 Using the App

The app runs in the background after 'Signing up or Signing in'; there is no other form of interaction with the app thereafter. You can access the log reports generated via the dashboard.

# 6 Troubleshooting

The following section lists some of the iCrawler app's possible issues and resolutions:

- **Does not launch.** Restart your phone and try to launch the application again.
- Crashes immediately after launch. Ensure that your device meets the minimum specifications to run iCrawler (See configurations). Go to Settings → Apps → Manage Apps → Running, to check if your apps are not using up all your memory. Try to end all processes you do not need and re-start your phone.
- Other unknown causes. If problems continue, delete the app completely and then reinstall it from Google Play Store.