VIRK Backend Setup Guide

We have designed VIRK to be able to be set up as quickly as possible. The backend comprises of 2 components:
1. Administrative website
2. Live statistics server

In order to have a smooth setup, please do ensure that all dependencies are met before beginning.

Dependencies

- LAMP server
- A DBMS of your choice
- Python 2.7 (Important note: the server uses some convenience features that are not present in Python 3.x)
- Websocket server implementation from https://github.com/dpallot/simple-websocket-server
- Linux screen

Setting up website

1. Create a new folder called virk in /var/www (`sudo mkdir /var/www/virk`)
2. Unzip the provided zip file to /var/www/virk (`sudo unzip Website.zip -d /var/www/virk`)
3. Set full read/write permissions on the directory (`sudo chmod 777 /var/www/virk -R`)

Setting up databases

1. Access your DBMS or start a MySQL console session based on preference
2. Create a new database called virk
3. Create a user for this database and enter its credentials into /var/www/virk/scripts/utils/database.php
4. Upload the provided SQL database structure to the database

Setting up live statistics server

1. Launch a terminal session
2. Ensure that Linux `screen` is installed
3. Begin a new background terminal session (`screen -S "StatsServer"`)
4. Install the necessary websocket library if not already done (`sudo pip install git+https://github.com/dpallot/simple-websocket-server.git`)
5. Navigate to /var/www/virk/bin

6. Start the server (`python StatsServer.py`)
7. Press `Ctrl-A` then `Ctrl-D` to detach from the session

Test the backend system

1. Navigate to http://localhost/virk/ (Replace localhost with the server's IP address if accessing remotely)
2. The default administrator will have the following credentials
   a. Username: `admin`
   b. Password: `password`
3. Try creating a new event and testing out the various links to ensure no 404s occur