Documentation
Web-Application

Installation

The Web-Application is based on the Django Web framework based on Python.
In order to run and test the application, it is recommended to use the latest version of Python 3. But Python 2.7 can also be used. For the development of the Web-Application, Python 2.7.6 has been used.

The easiest way to install Django is to use the pip installer. To install the latest Django release, use:

```
pip install Django==1.8.3
```

The graphics has been plotted with Matplotlib (http://matplotlib.org), Numpy (http://scipy.org), and Pytrie.

In order to install Matplotlib, clone the source using

```
git clone git@github.com:matplotlib/matplotlib.git
```

and build and install it with

```
cd matplotlib
python setup.py install
```

For pytrie use:

```
sudo easy_install PyTrie
```

For each operating system, there are different ways to install Numpy. Therefor, it is recommended to visit:

http://docs.scipy.org/doc/numpy/user/install.html

(Linux should already provide packages for Numpy)

Run the Application

In order to run the application, open the terminal and change to the directory of the web-application. For example:

```
cd …/desktop/repository/Webinterface/
```

Running the commend ls -l, should give you the following output:

```
Webinterface
database
db.sqlite3
manage.py
media
```

To start the application, run the command:

```
python manage.py runserver
```

Afterwards, the terminal should display the following:

```
Tonis-MBP:Webinterface toni$ python manage.py runserver
Performing system checks...

System check identified no issues (0 silenced).
July 26, 2015 - 16:08:20
Django version 1.8.2, using settings 'Webinterface.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

Finally, open a browser and type:

http://127.0.0.1:8000/

Running the application for the first time, it might be necessary to type in the following command:

python manage.py makemigrations
python manage.py migrate

Additionally, running the application for the first time, the application itself might not display anything. The reason is that there might no data (genome, technology platforms) uploaded yet. In order to upload data, an adm site has been introduced (http://127.0.0.1:8000/admin). Genomes and technology platforms can be uploaded on this page.

A temporary admin account has been used with the following data:
- username: admin
- password: 1

Running the application with the address http://127.0.0.1:8000/ again, should now display the uploaded genomes and technology platforms