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Twatter

The idea of this project is to create a Twitter like system where you can tell the world what is wrong. For example did is something wrong with your workplace, but you can't talk it in the open? Did you buy an Apple only notice it is rotten and missing something? So in conclusion, you can pour your heart anonymously or less anonymously (under a nickname) to our Twatter.

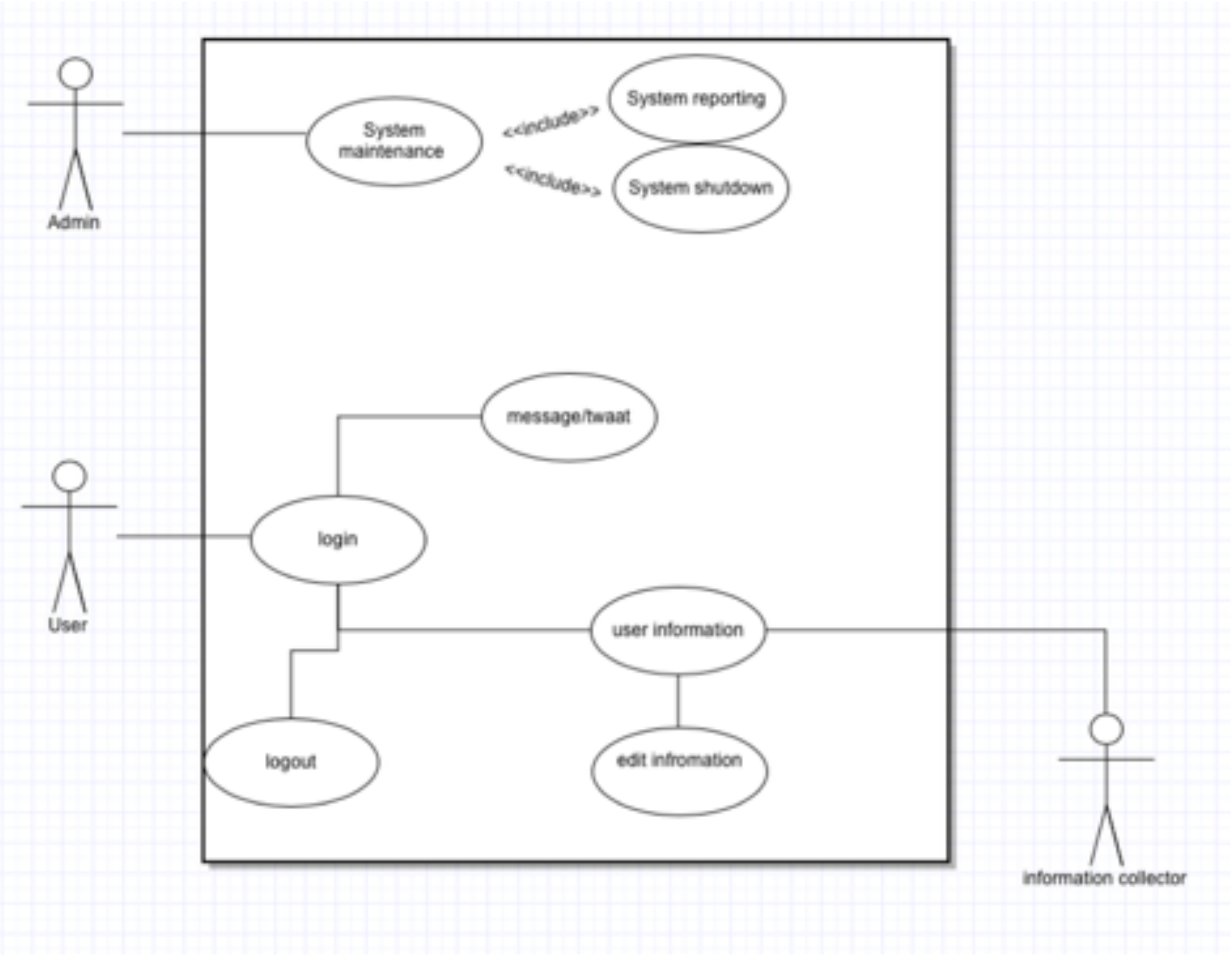
The goal of the system is to help people to relieve some stress and pour their hearts out to the world. It's quite a simple idea, but it is still not implemented to the world of web.

The project will be released on an VPS running in Germany with quite low specs. It will be accessible under http://valit.us/ and The local part of the project will be done on a Macbook and OSX environment. The project is not created to support or to be run on Windows computers, but accessing http://valit.us/ is destined to work everywhere, mobile or desktop - no matter.

Backend is going written Python as of for now. Frameworks used will be either Django or Flask and SQL database will run in PostgreSQL. All dependencies will be added in requirements.txt and can be installed through $p*ip install -r requirements.txt*.

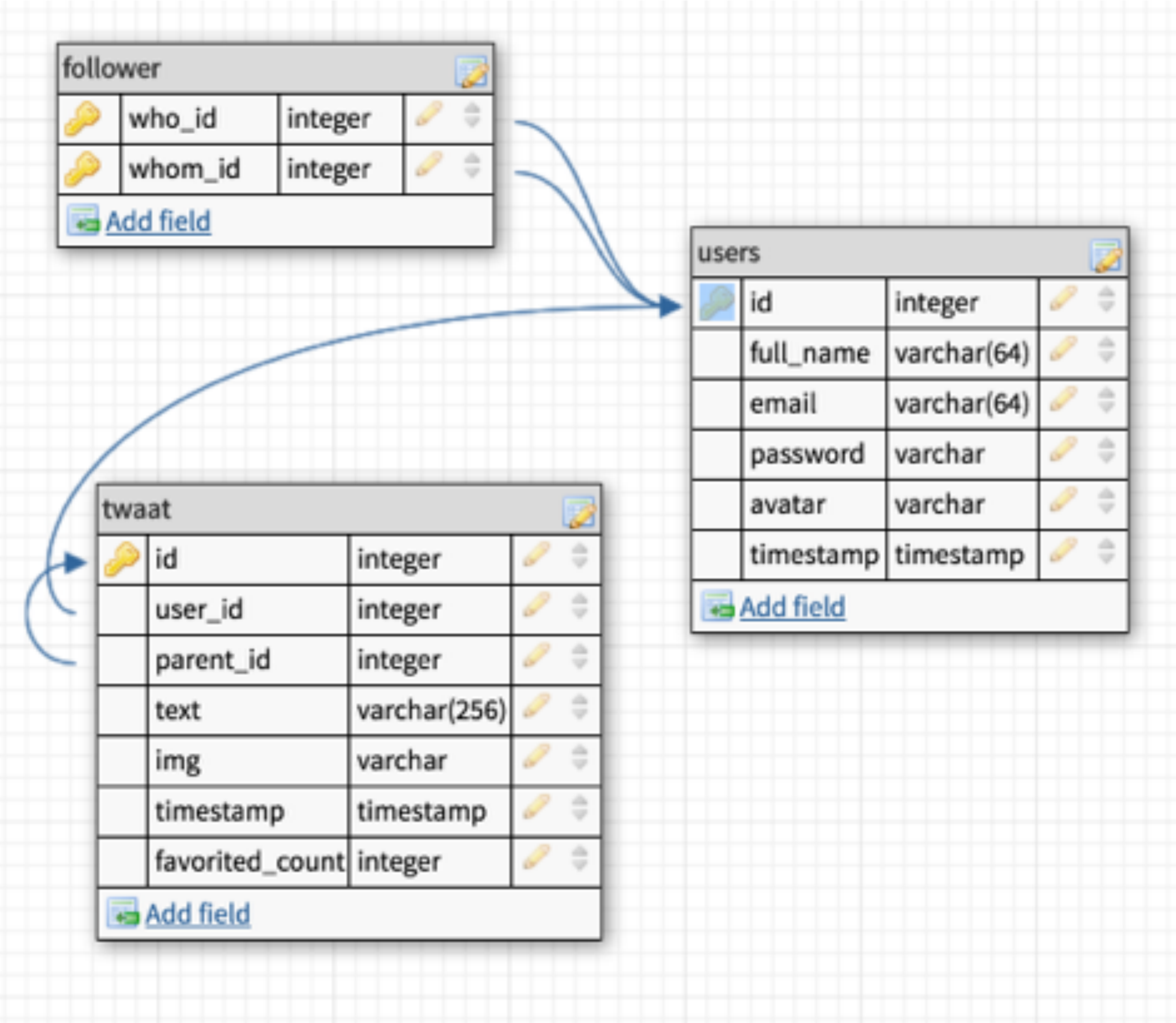
Browser is required to have javascript enabled, as the fronted is most likely to be done in React as of now.

Use cases



Use case is quite simple: There is a user who can login/logout and post a message or read them. Maybe later there can be a information/statistics collector to get info and statistics from the system.

SQL Schema



follower		
🔑	who_id	integer
🔑	whom_id	integer

users		
🔑	id	integer
	full_name	varchar(64)
	email	varchar(64)
	password	varchar
	avatar	varchar
	timestamp	timestamp

twaat		
🔑	id	integer
	user_id	integer
	parent_id	integer
	text	varchar(256)
	img	varchar
	timestamp	timestamp
	favorited_count	integer

Here is the first draft of the database schema. It's quite straight forward still, but there will be added some complexity later on.

Tables and attributes

We have 3 tables at the moment, **user, twaat and follower. User table** handles the user data, like emails, passwords and avatar data URI. Then we have the **follower table**, with this we can see who is following who and how many followers each have. This table has 2 foreign keys, of which both are user tables id (see image) Primary key is generated from both, this also allows a follower to be followed by the follower. Last we have the **twaat table**, which contains the messages users can send. Most important parameter is the 'id', as if the twaat has a reply, it is found in the 'parent_id' field.

The table as of 21. September is quite small and needs to be enlarged.

Keeping VPS up to date

Note: most of the commands require **super user rights (sudo)**
SSH to your VPS.
Creating a git pipeline to push to :

```
$ cd /var
$ mkdir repo && cd repo
$ mkdir twatter.git && cd twatter.git
$ git init -- bare  # this creates just the version control and no extra files
```

Creating a hook

For more information about hooks, see git guide: Customizing-Git-Git-Hooks
We are using post receive:

```
$ cd hooks
$ touch post-receive
$ nano post receive
#!/bin/sh
git --work-tree=/var/www/valitus --git-dir=/var/repo/twatter.git checkout -f
```

Note that my ‘public dir’ is ‘valitus’ and my repository is ‘twatter’.

Exit VPS now.

Configuring repository

```
$ cd ~/respos/twatter
$ git remote add live ssh://mxo@mxo.ninja/var/repos/twatter.git
$ git add .
$ git commit -m "lets go live"
$ git push origin live
```

And now, we can see our changes live :)

Remember to check that the /var/ folders are owned by you! I had minor problem as my /var/repos/ was owned by ‘root’ and I had no access pushing it:

```
remote: fatal: Unable to create temporary file '/var/repos/twatter.git/objects/pack/tmp_pack_XXXXXX': Permission denied
```

This was fixed by `chown mxo /var/repos/ -R` where -R is recursive (subfolders etc)