OVERWATCH

Inhoud

OVERWATCH

Algemeen design

Sparrow

```python
class User(RtEntity):

    key = UID = KeyProperty()

    name = Property(str)


class Status(RtEntity):

    key = SID = KeyProperty()

    user = RTReference(User)

    text = Property(str, constraint=lambda s: len(s) < 500)
```

Sparrow

```
u = User.find_by_key(123)  # from cache if possible

statuses = Status.get(Status.user == u.key).order(+Status.SID).all()

new_status = Status(user=u.key, text="Test")

new_status.insert()  # User krijgt notificatie, RTReference


new_status.text = "blabla"  # constrained checked

new_status.update()
```

Layout

1. Home
2. Sensors
3. Statistics
4. Admin (niet voor gewone users)
5. Social
   a. Home
   b. My Profile
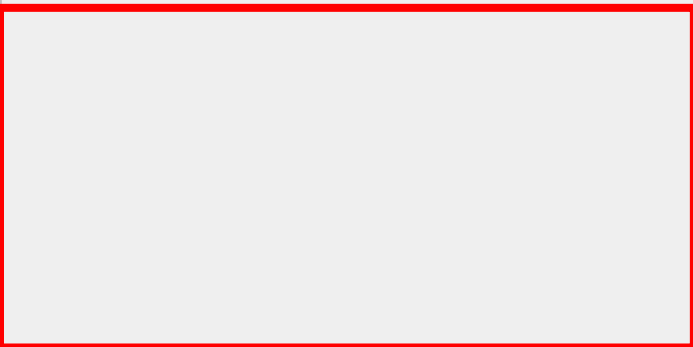   c. My Friends
   d. Groups

Features

1. Basisvereisten
2. Autocompletion tags
3. Ondersteuning gravatars
4. Upload data files(ElecSim)
5. Printable en customizable admin reports
6. Social:
   a. Likes
   b. Comments
   c. Status
   d. Groups
   e. Friends
   f. Graph sharing

Database

{"type":"create_graph","group_by":
[{"what":"User","IDs":[2]}],"where":
[{"field":"SID","op":"in","value":
[1,9,10,11,12,13,14,15,16,17]}],"
timespan":{"valueType":"
HourValue","start":1461801600,"
end":1461887940},"ID":13}

Aggregatie

Aggregatie/Datamanagement

- Ruwe waardes opgekuist (enkel bij veranderingen)
- Aggregatie op basis van uur, dag, maand en jaar
    - Hourvalue
    - DayValue
    - Monthvalue
    - YearValue

SQL Queries

- ## Autocompletion text attribute (Tag):
  - SELECT * FROM table_Tag WHERE table_Tag.text IN (SELECT MIN(table_Tag.text) FROM table_tag GROUP BY table_Tag.text)

- ## Select average value:
  - SELECT avg(value), time AS value FROM {g.cls._table_name} WHERE sensor_SID IN {sensors} GROUP BY time HAVING time >= %(start)s AND time < %(end)s ORDER BY time

- ## Find groups for specific user:
  - SELECT * FROM table_Group WHERE table_Group.gid IN (SELECT table_Membership.group_gid FROM table_Membership WHERE table_Membership.user_uid = {gegeven UID})

Samenwerking

- Git issues
  - Mogelijkheid om backend errors direct in git issues om te zetten
- Continous integration
  - git push → server start opnieuw op
  - frontend moet niet alles installeren

Extra functionaliteit

- Live updates van data
- Company Rebranding
- Superadmin (cfr sudo)
- Extra types en eenheden
- Social media integratie (Facebook, Twitter, …)
- Extrapolatie en interpolatie van data
- Grafieken als belangrijk markeren
- Verbeteren homepagina (suggesties …)
- Notificaties

Demo

OVERWATCH

overwatch.com