

DHBW hub

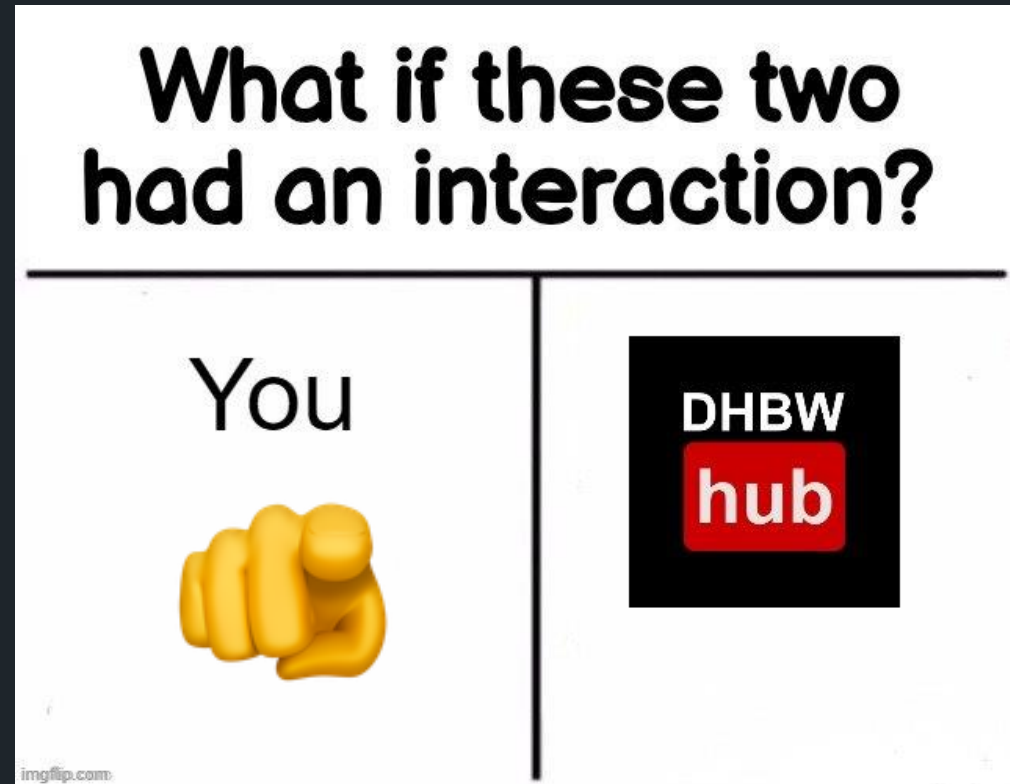
DENNIS, FURKAN, JONAS, JOSHUA, MAX

Why use DHBWhub?

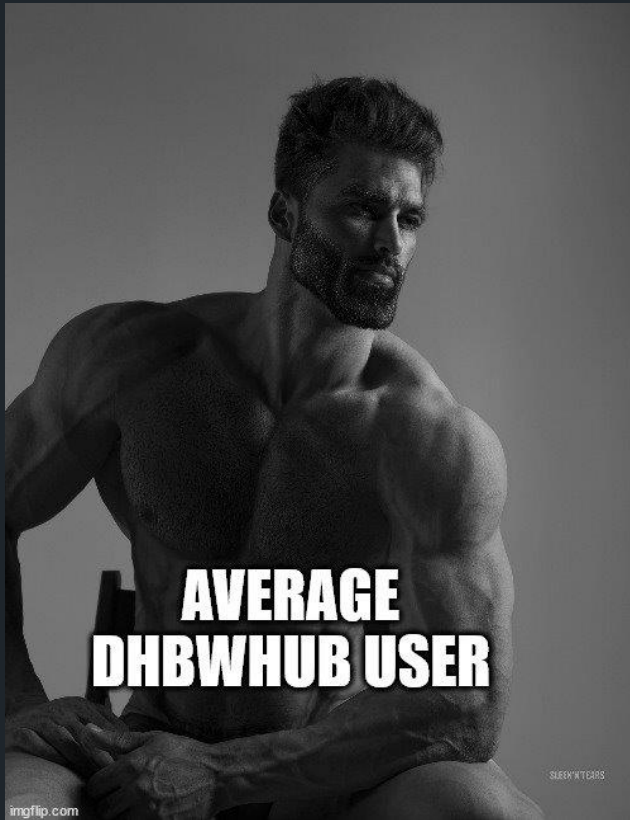
Log in securely



Interact with content



Why use DHBWhub?



Why use DHBWhub?

Keeping track of events



User-friendly design



Architectural design - Goals



Usability

- Intuitive design.
- Visual feedback.

Performance

- Reducing loading time as much as possible.
- Reduce amount of transferred data and data queries.



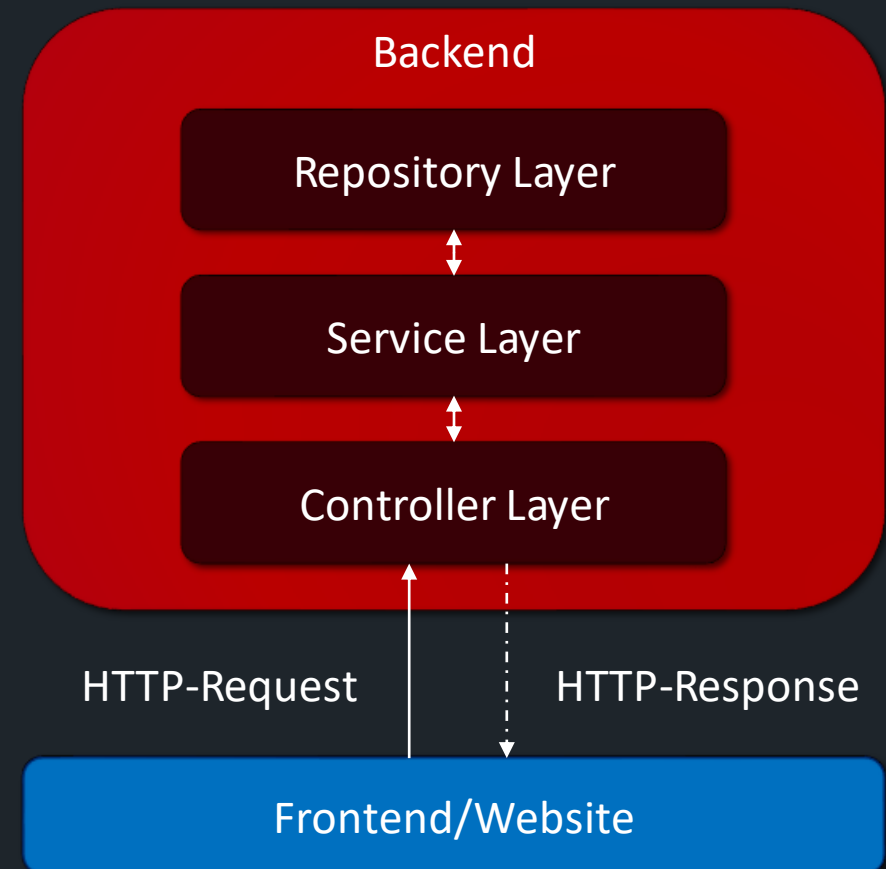
Modifiability

- Creating new features or extending the application shouldn't be complicated.
- Modularity.

Architectural design - Decisions

REST-architecture

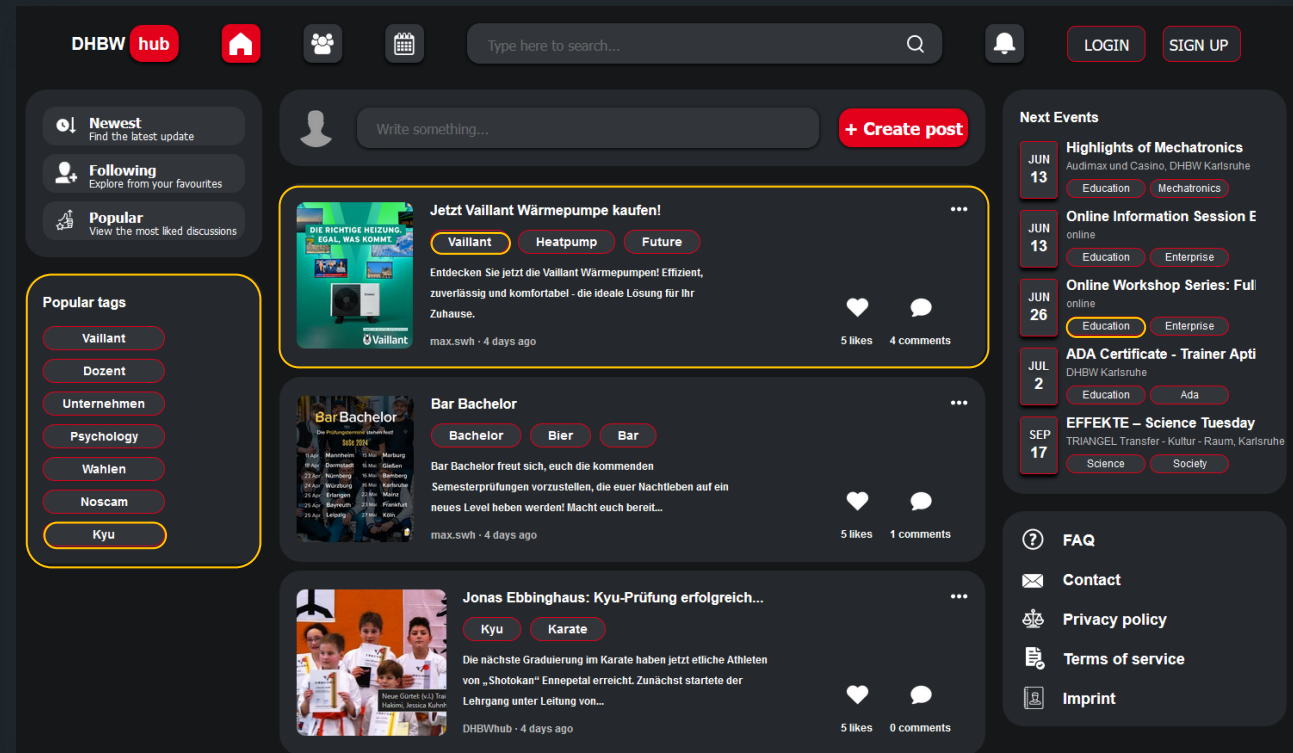
- Website
 - Communicates with the backend through predefined interfaces e.g. `GET /user/user-information/{id}`.
- Backend
 - Controller layer – Data interface for the website.
 - Service layer – Processing of data.
 - Repository layer – Retrieving data from the database.
 - Utility layer - Data mapping and other utilities.



Architectural design - Decisions

Component-based

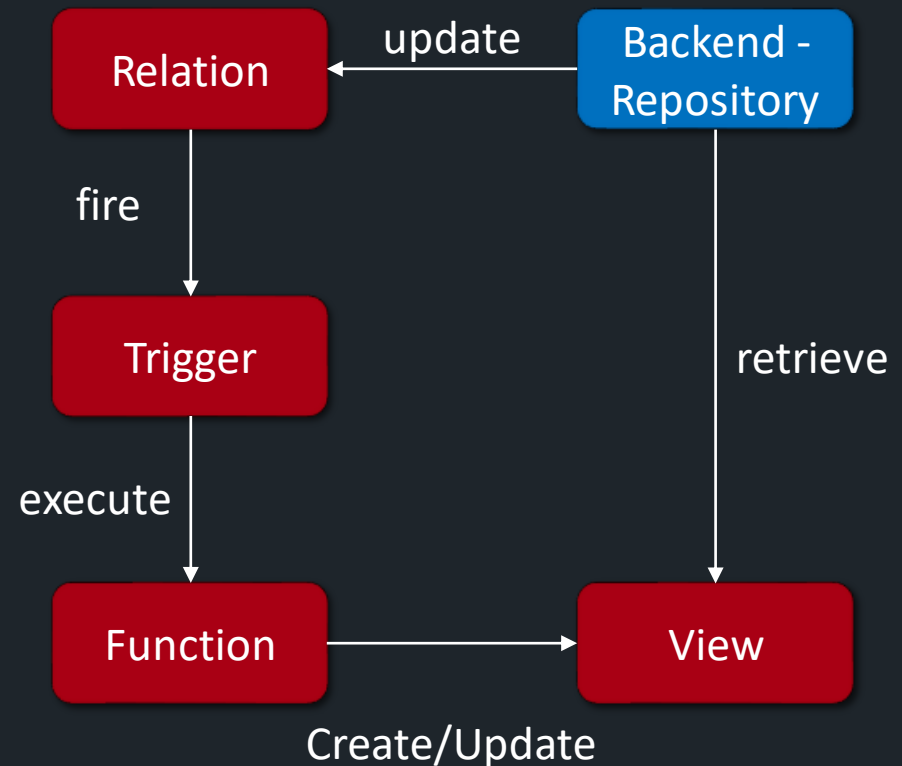
- Splitting the website into smaller components consisting of other smaller components.
- Atoms, molecules, organisms and services.
- Modular built.



Architectural design - Decisions

Database

- External Views
 - Frequent queries or calculations stored in a relation.
- Trigger
 - Executes a trigger function when a table is updated.
- Trigger functions
 - Contains the logic.
 - In our case, the creation of certain views.



Design patterns

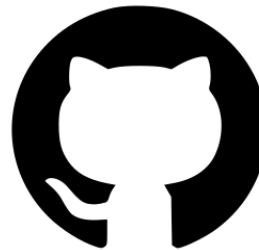
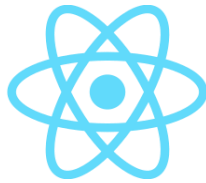
MVC-design

- Separation of the application into model, view and controller.
- Facilitates maintenance and expansion of the application.

Single responsibility principle

- Each method has a single task.
- Increases the clarity and maintainability of the code.

Tech Stack



Quality Assurance - Testing

Backend tests

Frameworks:

- JUnit5
- Mockito
- Maven

Focus:

- Correct transformation of data

```
[INFO] Results:
[INFO]
[INFO] Tests run: 290, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 25.123 s
[INFO] Finished at: 2024-06-10T22:14:11+02:00
[INFO] -----
```

Quality Assurance - Testing

Frontend tests

Frameworks:

- Jest
- React

Focus:

- Accurate rendering of objects
- Correct function-call logic

► Run npm test

```
> dhw-hub@0.1.0 test
> jest
```

```
PASS src/services/tests/ProfilePictureService.test.tsx (8.202 s)
PASS src/services/tests/AuthService.test.tsx (8.21 s)
PASS src/services/tests/TagService.test.tsx (8.331 s)
PASS src/services/tests/DescriptionService.test.tsx
PASS src/services/tests/TimeService.test.tsx
```

```
Test Suites: 5 passed, 5 total
Tests:       41 passed, 41 total
Snapshots:   0 total
Time:        9.45 s
Ran all test suites.
```

Quality Assurance - Testing

Database tests



Quality Assurance - Clean Code



Single Responsibility Principle

- Each method is responsible for one particular action

Principle of Least Astonishment

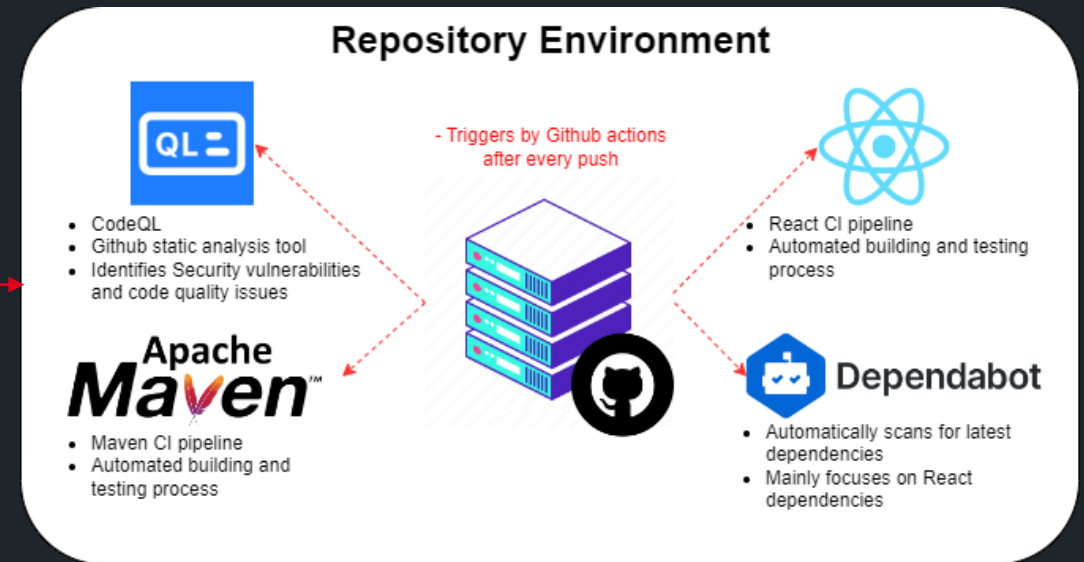
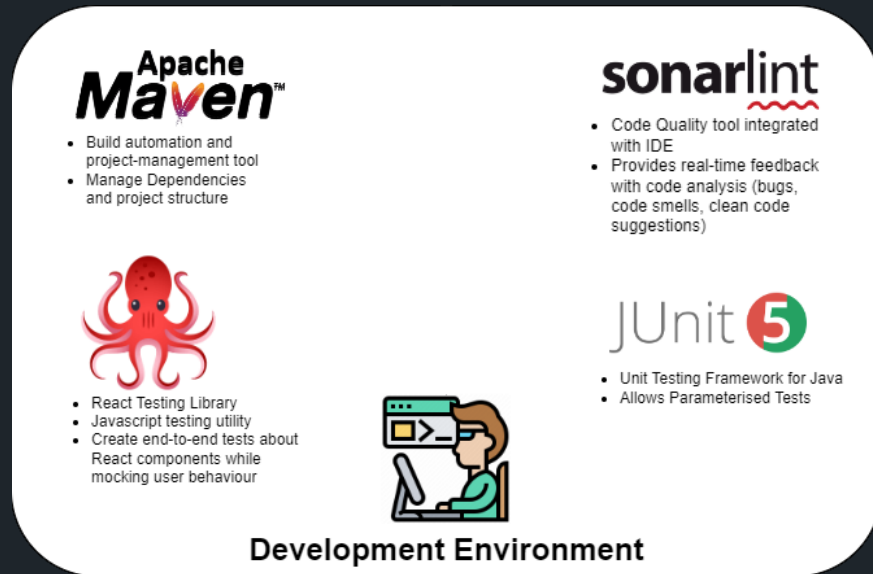
- Methods should be self-explanatory
- Comment code logic when needed



Conventions

- CamelCase
- Links divided by hyphens

Project management – CI/CD



Live demonstration



Live demonstration



Search
function



Notifications

Follow users



Highlights of
DHBWHub (Demo)



Create posts and comments

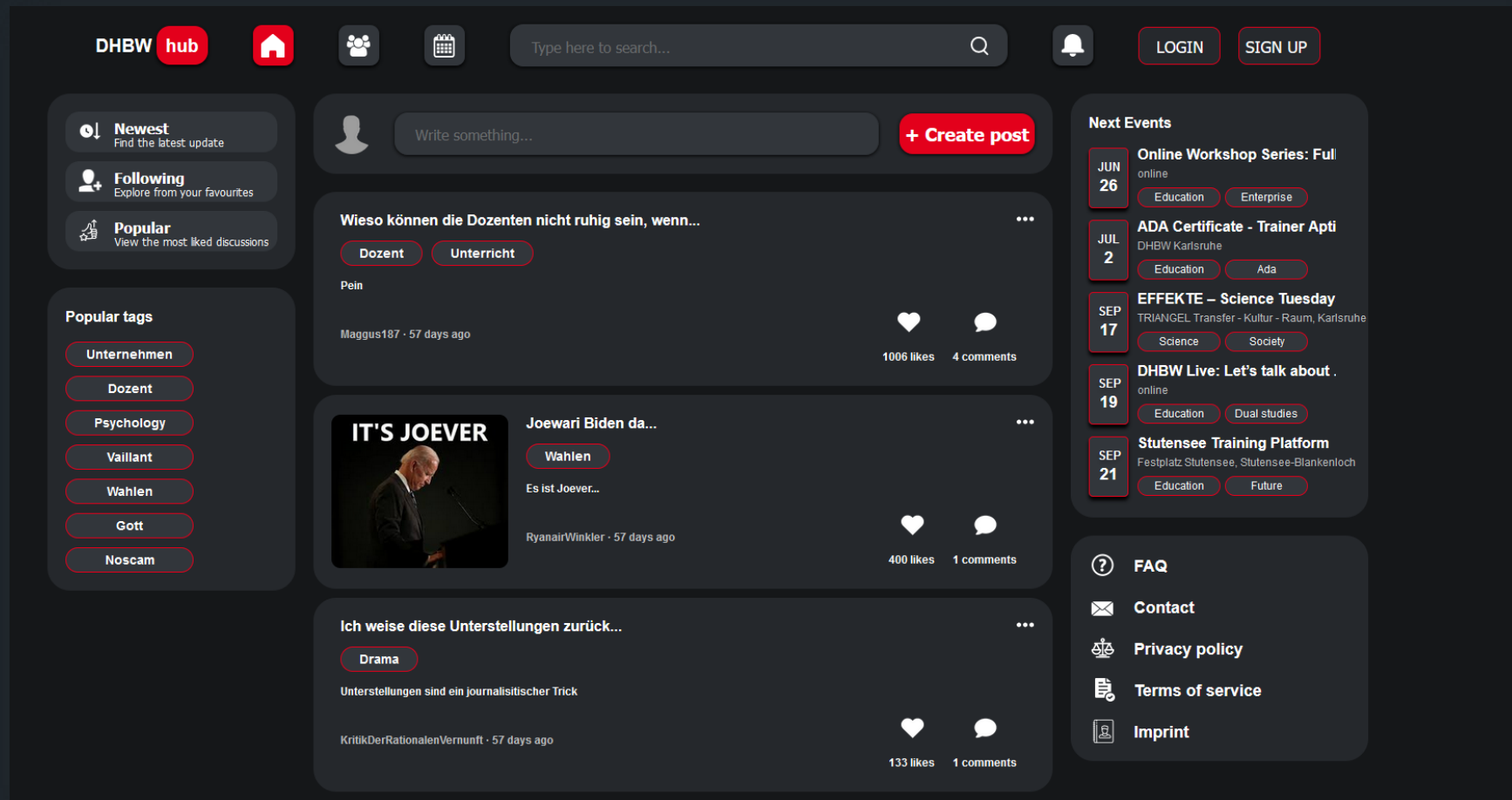


Calendar and
Eventposts

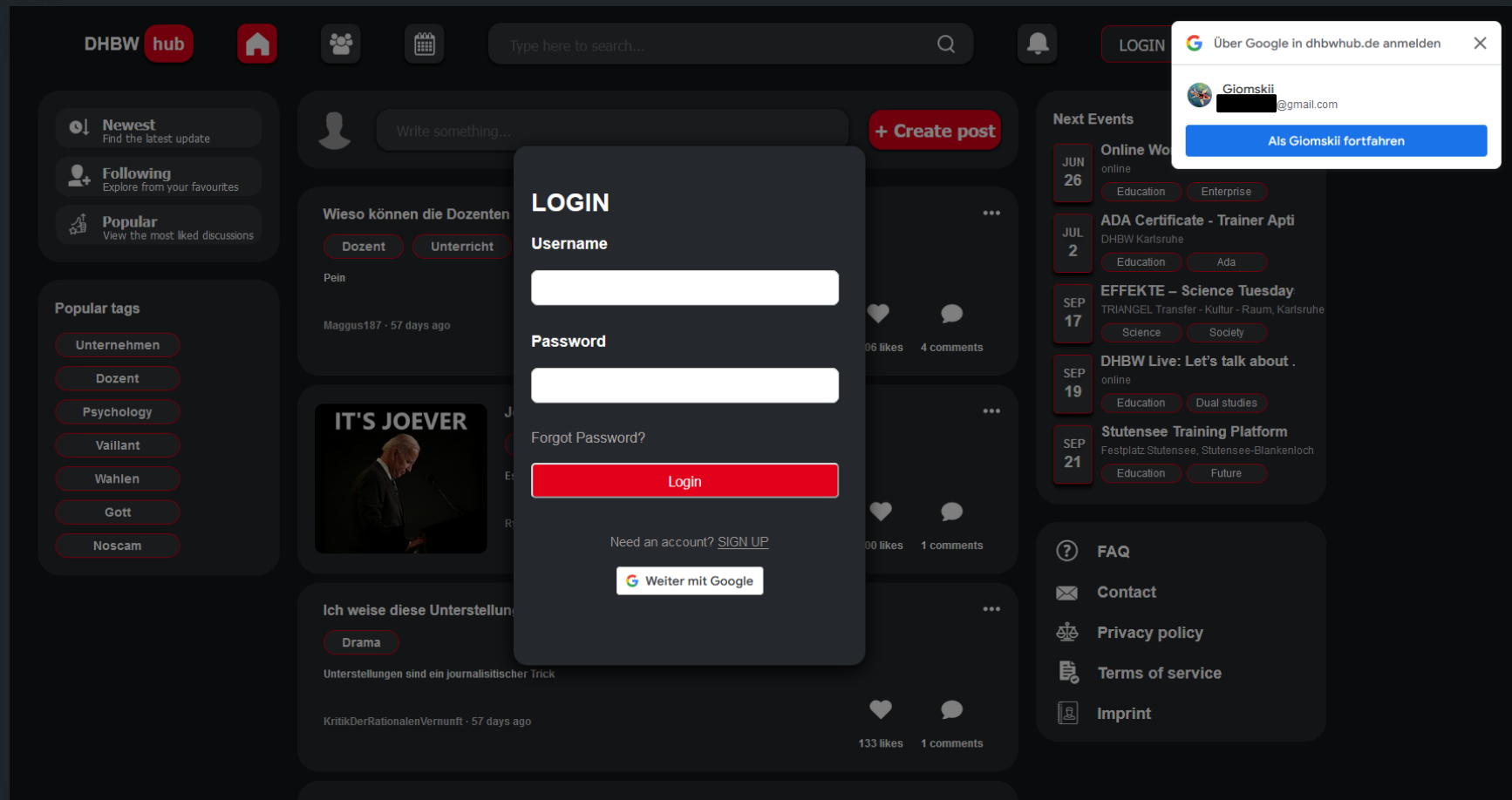


Profile
personalization

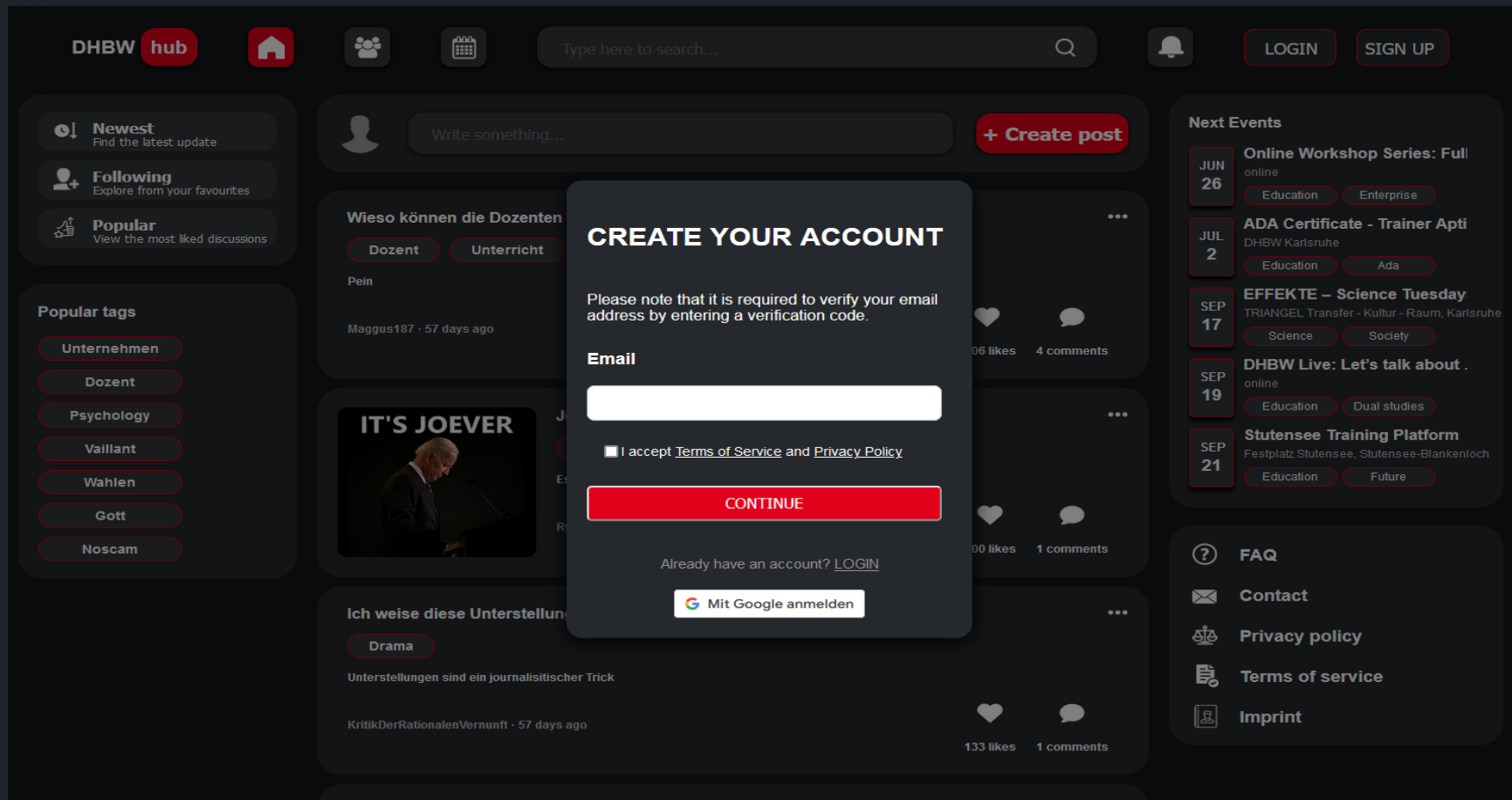
Live demonstration - Homepage




Live demonstration – Sign in




Live demonstration – Sign up





Live demonstration – Posts + Comments






Title




Enter some text...

Add a tag



Post






max.swh • 14 hours ago



3 likes

1 comments


DHBW hub



Type here to search...



← Post



max.swh
5 days ago


Jetzt Vaillant Wärmepumpe kaufen!


Entdecken Sie jetzt die Vaillant Wärmepumpen! Effizient, zuverlässig und komfortabel - die ideale Lösung für Ihr Zuhause.

Vaillant

Heatpump


Future







5 likes


5 comments









Reply




max.swh
1 day ago

Test







0 likes




max.swh
2 days ago

Trotz steigender Strompreise sind Wärmepumpen kosteneffizient, unabhängig und nachhaltig.







1 likes




max.swh
2 days ago

Unsere Wärmepumpen nutzen ca. 75 % Umweltenergie und benötigen 25 % Strom. Der genaue Verbrauch hängt von Modell, Umweltquelle und Isolierung ab. Beispiel: Luft/Wasser-WP aroTHERM plus VWL 75/6 verbraucht ca. 2.927 kWh/Jahr.







1 likes



dennis.kopp
2 days ago

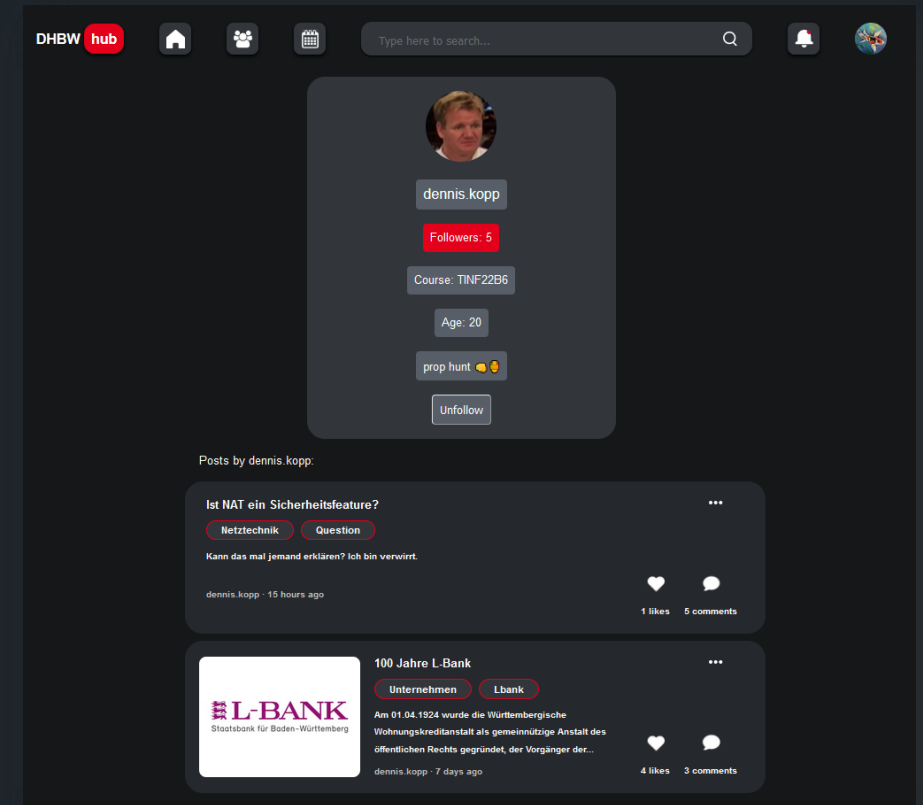
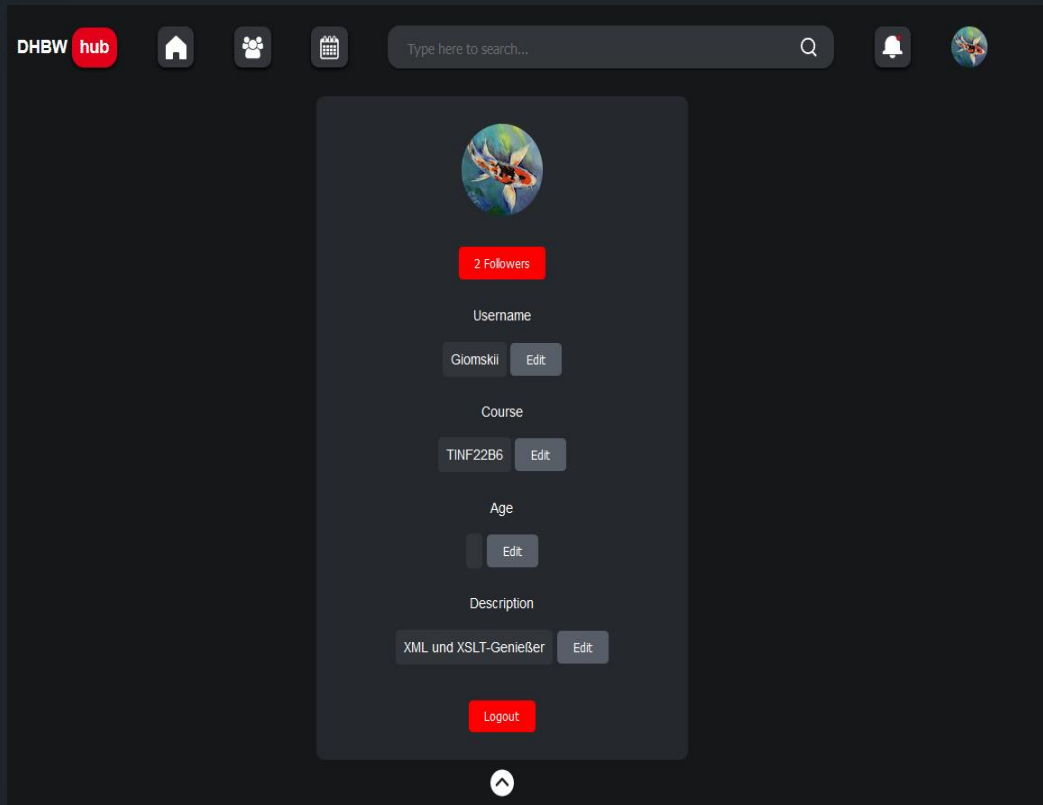
Interessanter Werbepost, doch es fehlen Details wie genaue Energieeffizienz und Betriebskosten. Mehr Transparenz würde Käufern helfen, die Vorteile zu verstehen.








2 likes

Live demonstration – Profile + User






Live demonstration – Calendar + Events

DHBW hub



Type here to search...






Today Back Next

June 2024




Month Week Day Agenda

Mon	Tue	Wed	Thu	Fri	Sat	Sun
27	28	29	30	31	01	02
03	04	05	06	07	Campus Day ...	09
10	11	vocatum Karlsruhe	13	14	15	16
17	18	19	Highlights of M... Online Informa...	20	21	22
24	25	Online Worksh...	27	28	29	30

DHBW hub



Type here to search...



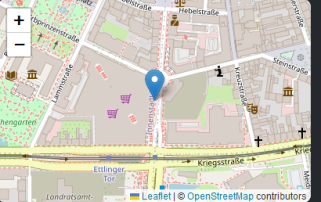
← Event


17.9.2024
7:30 pm - 9:30 pm

Science
Society

Wrong and manipulated - why we easily fall for fakes

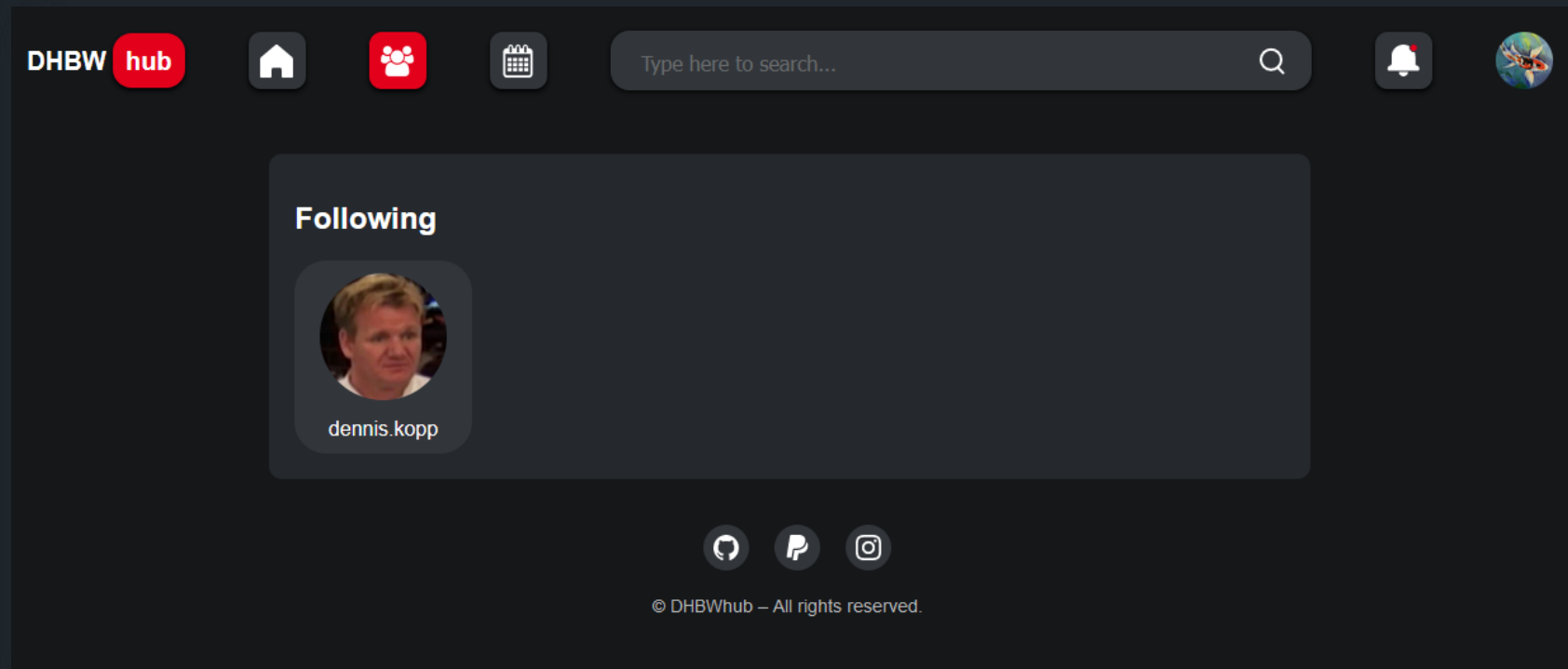
1 likes 0 comments



Post your answer

Reply

Live demonstration – Following page






Live demonstration – Popular Tags



Popular tags


- Unternehmen
- Dozent
- Psychology
- Vaillant
- Wahlen
- Gott
- Noscam


DHBW **hub**




Type here to search...




**Newest**
Find the latest update

**Following**
Explore from your favourites

**Popular**
View the most liked discussions

100 Jahre L-Bank




Staatsbank für Baden-Württemberg


Unternehmen


Lbank

Am 01.04.1924 wurde die Württembergische Wohnungskreditanstalt als gemeinnützige Anstalt des öffentlichen Rechts gegründet, der Vorgänger der...

dennis.kopp · 7 days ago

 4 likes

 3 comments



Vaillant


150 Jahre Vaillant


Vaillant

Unternehmen

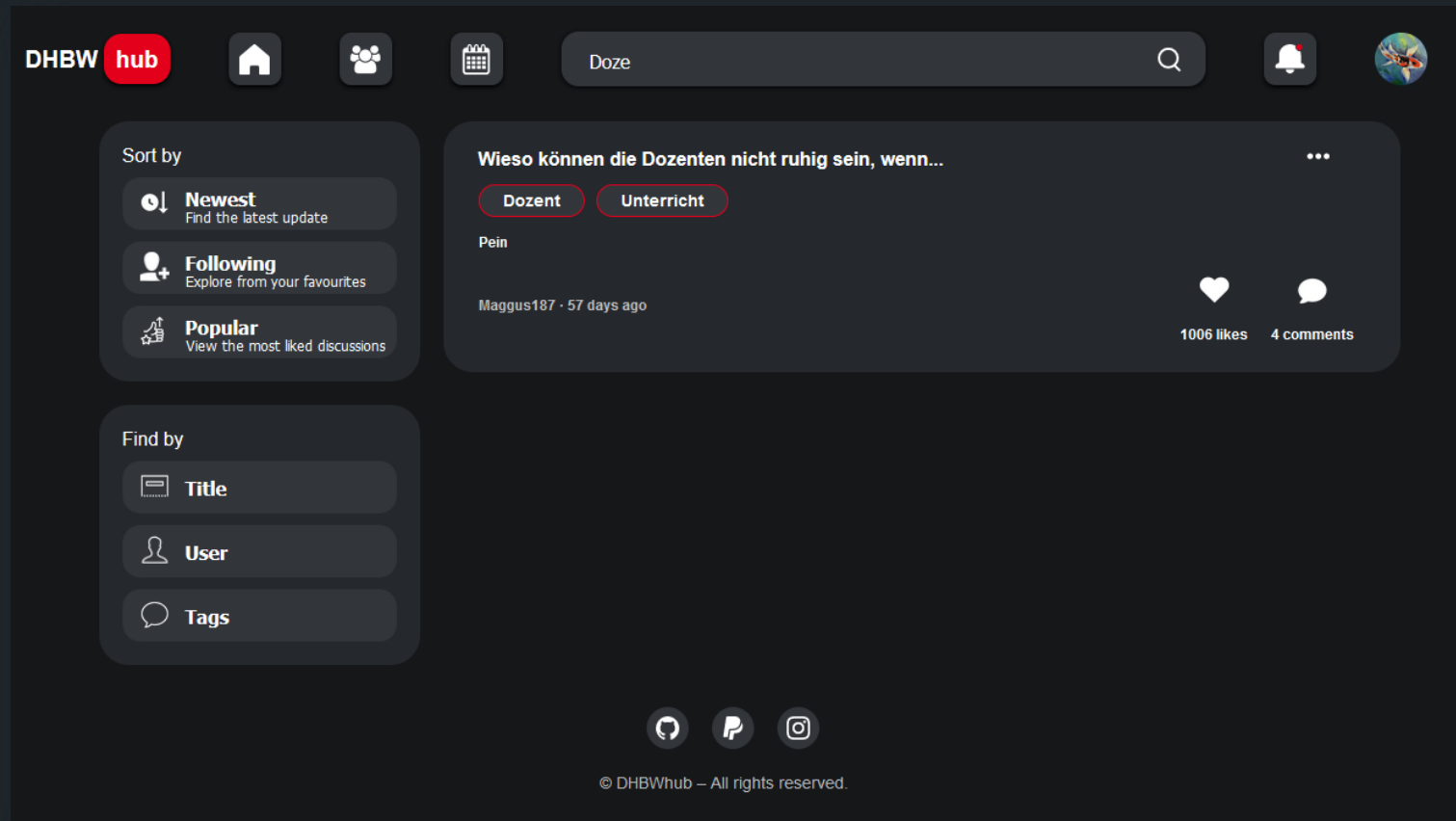
Alles gute zum Jubiläum!

max.swlh · 8 days ago

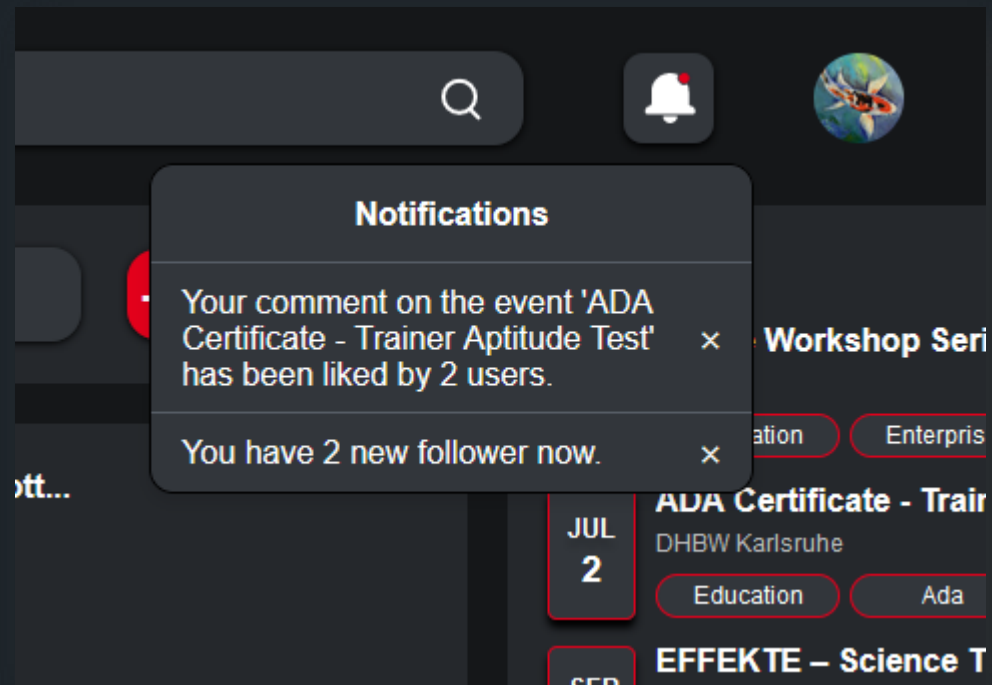
 2 likes

 3 comments

Live demonstration – Searchbar



Live demonstration – Notifications



Project management – Lessons learned

- CI/CD is the main branch's best friend.
- Diagrams help break down complex structures.
- Communication is underrated.



Any questions?





SCAN ME

Please support us!