



Benutzername



Passwort



Marktplatz Deals Wünsche Games Entertainment

Play Video ▶



Dein Dshini

Werde Teil der größten & beliebtesten deutschen Seite im Web.

Neo4j at Dshini

Ich will über bis in

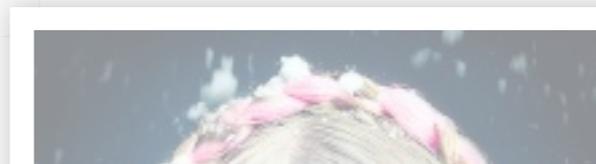
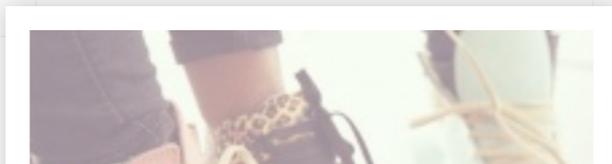
» mehr erfahren

Entdecke & teile Dinge die Du magst

» sammle Punkte » geh shoppen » spare bis zu 100%

Das mögen Nutzer

Spotlight ▼



Who am I?

- Klaus Großmann
- CTO at Dshini
- Mail: klaus@dshini.net
- Twitter: [@iKlaus](https://twitter.com/iKlaus)
- GitHub: [iKlaus](https://github.com/iKlaus)

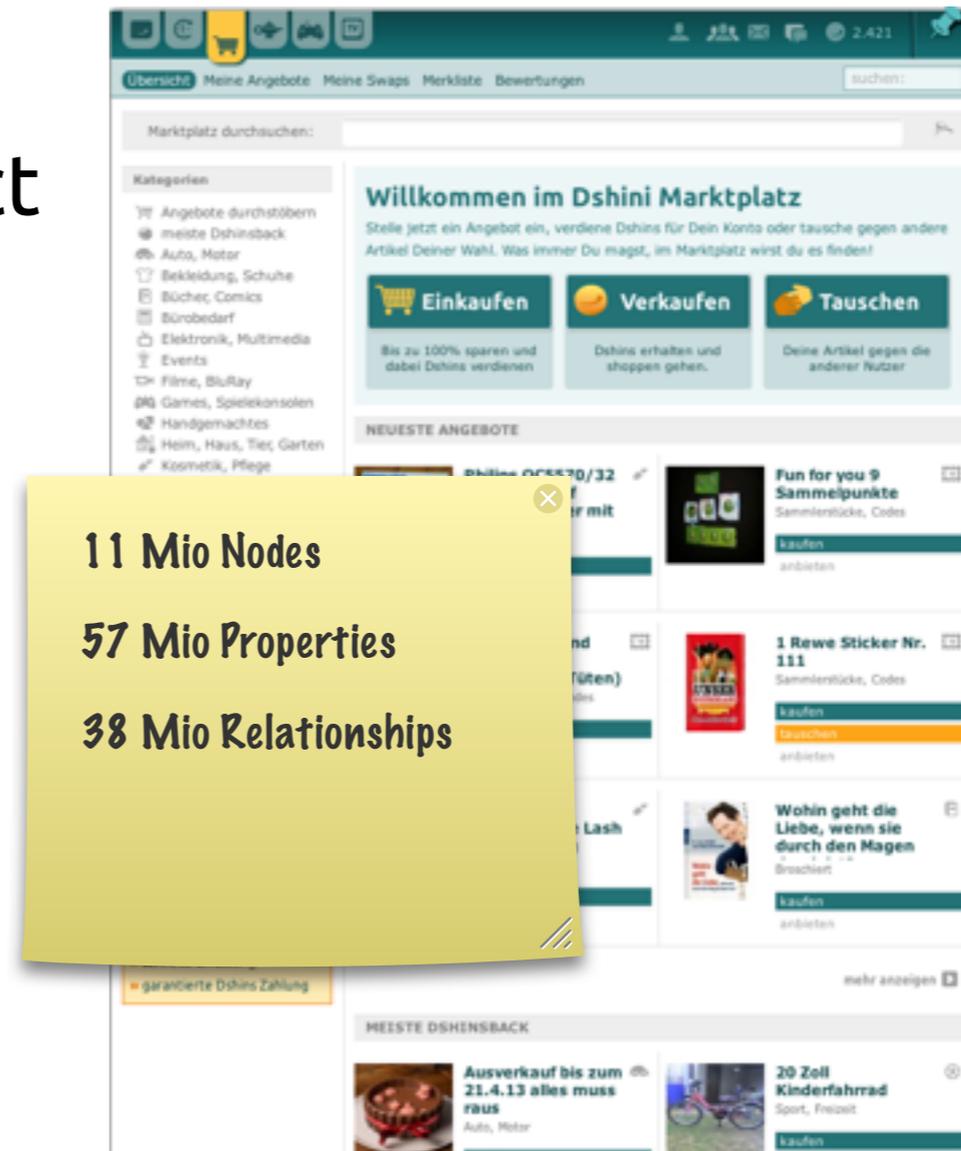


Who are we?

- Dshini UG (haftungsbeschränkt)
- 2010 founded startup
- based in Weimar/TH Germany
- runs the social networking platform www.dshini.net

Why Neo4j?

- 2011 «Marketplace»-Project
- Recommendations?
- Schema-less data
- REST-Interface
- Awesome Cypher-QL

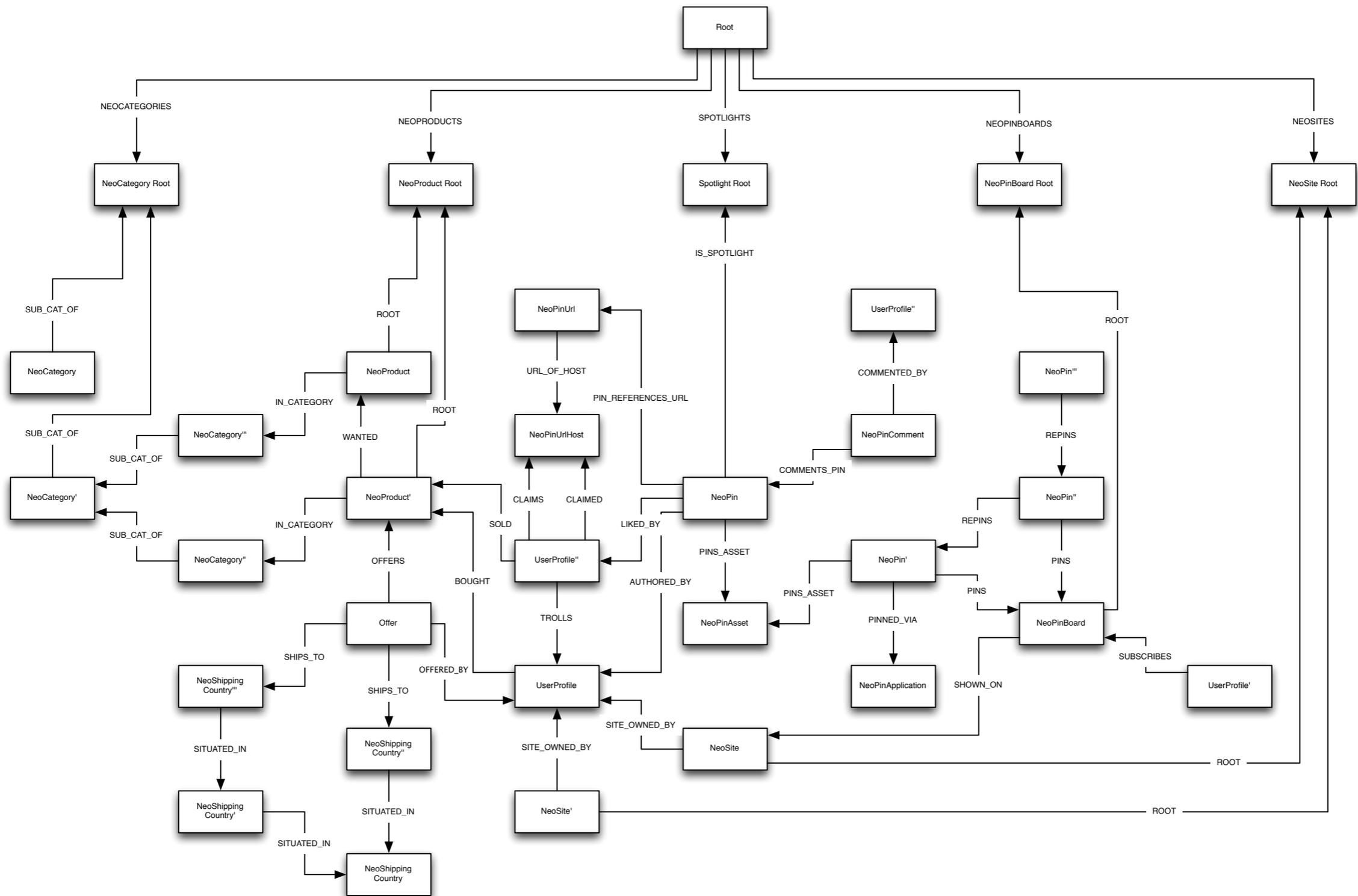


The screenshot shows the Dshini Marketplace website. A yellow callout box is overlaid on the page, containing the following statistics:

- 11 Mio Nodes
- 57 Mio Properties
- 38 Mio Relationships

The website interface includes a navigation bar with links like 'Übersicht', 'Meine Angebote', 'Meine Swaps', 'Merkmale', and 'Bewertungen'. Below the navigation bar is a search bar and a list of categories. The main content area features a welcome message, buttons for 'Einkaufen', 'Verkaufen', and 'Tauschen', and a section for 'NEUESTE ANGEBOTE' with various product listings.

Domain-Model



Pins in the Graph

Ralf Wipper Angebote Wunschzettel Folgen mir Folge ich suchen:

Level 46
★★★★★ (0)

Ralf Wipper

Wohnort Weimar
Alter 32
Geschlecht männlich
Beziehung vergeben

719 folgen mir 20 folge ich

Profil bearbeiten · Sichtbarkeit festlegen

Mein Status: 4 Tage her
was kann Bootstrap3

Pins in the Graph

The image shows a social media profile for Ralf Wipper. The profile picture is a photo of three people. The profile information includes: Level 46, 5 stars (0 reviews), Wohnort: Weimar, Alter: 32, Geschlecht: männlich, and Beziehung: vergeben. The status is "Mein Status: 4 Tage her was kann Bootstrap3". The profile is annotated with a red border and several labels: "Follower" (green text with a green circle around "719 folgen mir"), "Followings" (blue text with a blue circle around "20 folge ich"), and "Site" (red text with a red line pointing to the profile picture area).

Level 46
★★★★★ (0)

Ralf Wipper

Wohnort Weimar
Alter 32
Geschlecht männlich
Beziehung vergeben

Mein Status: 4 Tage her
was kann Bootstrap3

719 folgen mir 20 folge ich

Site

Pins in the Graph

Pinnwand

7 Boards • 47 Pins • 21 Likes • Gästebuch

Reihenfolge ändern

The image shows a grid of six Pinterest boards. Each board has a title bar, a count of pins, a grid of pin thumbnails, and a 'bearbeiten' (edit) button at the bottom.

- Golf:** 30 pins. Title bar: 'Golf'. Pins include golf-related images and a golf cart.
- Apple:** 10 pins. Title bar: 'Apple' with three apple icons. Pins include an iPhone and other Apple products.
- Fotografie:** 40 pins. Title bar: 'Fotografie'. Pins include a neon sign that says 'ALL YOU NEED IS', a motorcycle, a person, and various architectural photos.
- Videos:** 110 pins. Title bar: 'Videos'. Pins include a grid of small video thumbnails and a person in a white lab coat.
- Gemischtes:** 10 pins. Title bar: 'Gemischtes'. Pins include a screenshot of a football match report from 'GILLETTE STADIUM - FORDBOROUGH'.
- DevOps:** 10 pins. Title bar: 'DevOps'. Pins include a server rack and a cartoon character.

Pins in the Graph

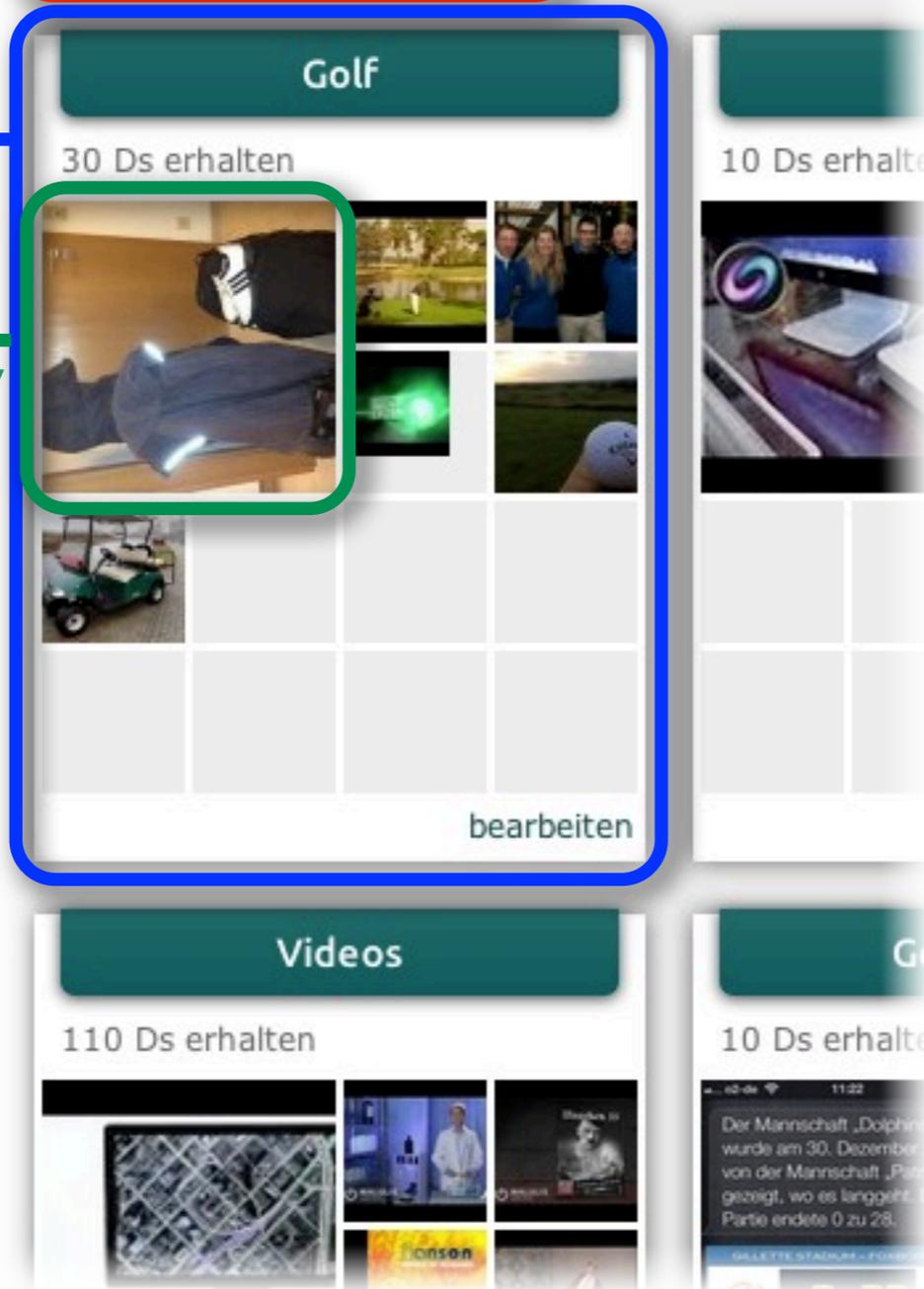
Site-Metas

Pinnwand

7 Boards · 47 Pins · 21 Likes Gästebuch

Board

Pin-
Preview



```
// a site's boards
START n=node({STARTIDS})
MATCH n<-[:BOARD_SHOWN_ON]-boards
RETURN boards
ORDER BY boards.SortOrder?
```

```
// preview pins
START n=node({STARTIDS})
MATCH n<-[:PINS]-pins,
      pins-[:PINS_ASSET]->assets
RETURN pins, assets
ORDER BY pins.CreatedAt DESC
SKIP {QSKIP}
LIMIT {QLIMIT}
```

Pins in the Graph



Try New Things.



Laís Arósio
auf **Soo süß** (◡‿◡)



178



58



95



cocoslove1: sooo niedlich *-*



ina1971: süss



lillyfee1978: süß



Retro 60s hair makeup



Laís Arósio
auf **Hairstyles**



62



21



44



regenwolke: cool, nicht schlecht echt schöne Frau



schnucki1989: woooooow



lauracookie: hübsch ! ☺

schön



smartys3
auf **Bilder**



31



14



26



corny09: tolles bild



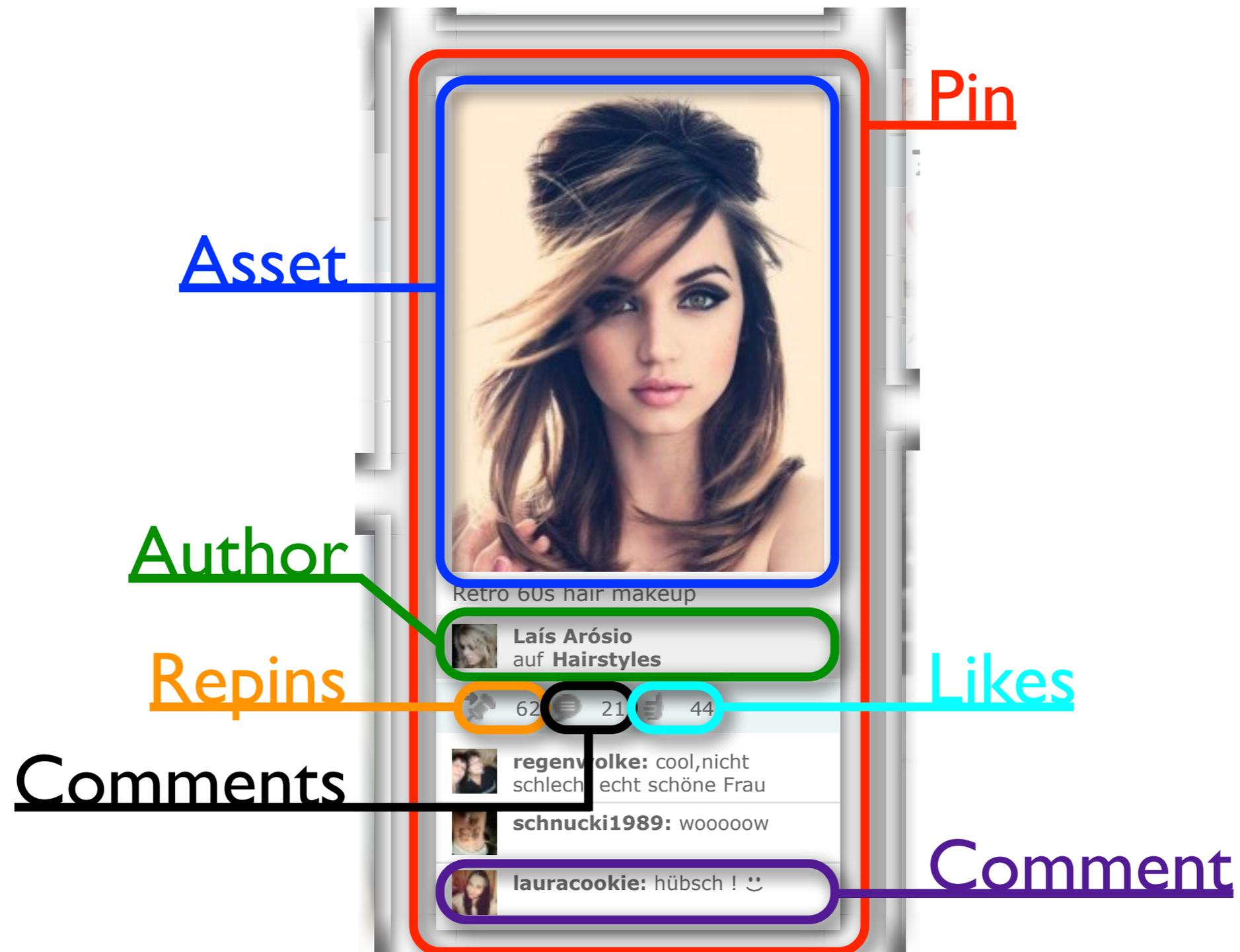
wunderpaula: hübsch! und so tolle farben



zimtstern-89: yay bunt ☺



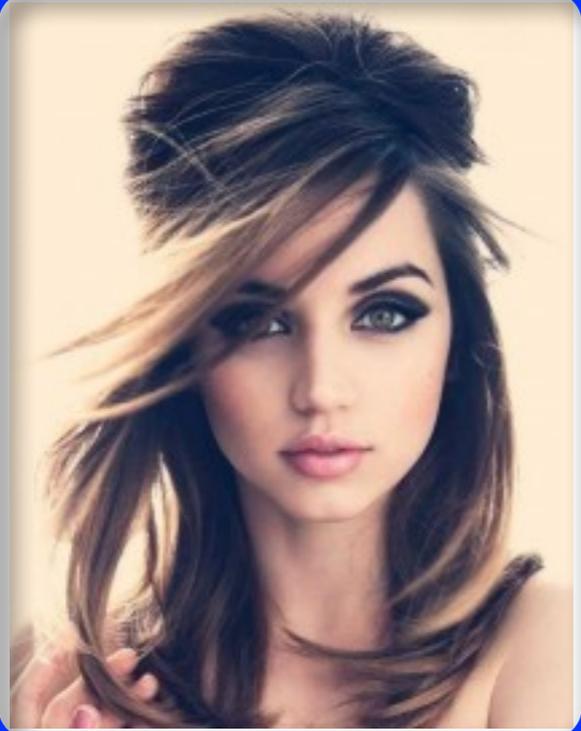
Pins in the Graph



Pins in the Graph

Pins in «Spotlight» Category (staff picks)

```
START n=node:neo_root(RootOf = {ROOT}),
      current=node:user_profile(UserId = {USERID})
MATCH n<-[:IS_SPOTLIGHT]-pin
WHERE (pin.CreatedAt<{PINCREATEDAT})
WITH pin, current
ORDER BY pin.CreatedAt DESC
SKIP {QSKIP}
LIMIT {QLIMIT}
MATCH pin-[:AUTHORED_BY]->author,
      pin-[:PINS]->board,
      pin-[:PINS_ASSET]->asset
WHERE (NOT(author<-[:TROLLS]-current))
RETURN pin, author, board, asset
```



Retro 60s hair makeup

 **Laís Arósio**
auf **Hairstyles**

 62  21  44

 **regenwolke:** cool,nicht
schlecht echt schöne Frau

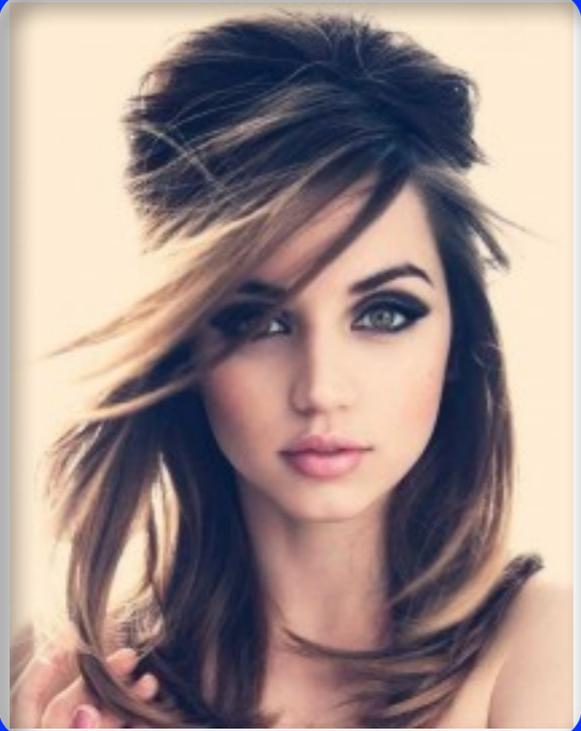
 **schnucki1989:** wo000ow

 **lauracookie:** hübsch ! 😊

Pins in the Graph

Pins by a given category

```
START cat_board=node({CAT}),
      n=node(0)
MATCH cat_board<-[:SUB_BOARD_OF]-board
WITH board, n
MATCH board<-[:PINS]-pin-[:AUTHORED_BY]->author
WHERE (pin.CreatedAt<{PINCREATEDAT})
WITH pin, author, board, n
WHERE NOT(author<-[:TROLLS]-n)
WITH pin, author, board
ORDER BY pin.CreatedAt DESC
SKIP {QSKIP}
LIMIT {QLIMIT}
MATCH pin-[:PINS_ASSET]->asset
RETURN pin, author, board, asset
```



Retro 60s hair makeup

 Laís Arósio
auf Hairstyles

 62  21  44

 regenwolke: cool,nicht
schlecht echt schöne Frau

 schnucki1989: wo000ow

 lauracookie: hübsch ! 😊

Pins in the Graph

Pins by a given users timeline

```
START n=node({STARTIDS})
MATCH n-[:SUBSCRIBES]->site,
      site<-[:BOARD_SHOWN_ON*0..1]-board
WITH board, n
MATCH board<-[:PINS]-pin-[:AUTHORED_BY]->author
WHERE (pin.CreatedAt<{PINCREATEDAT})
WITH pin, author, board, n
WHERE NOT(author<-[:TROLLS]-n)
WITH pin, author, board
ORDER BY pin.CreatedAt DESC
SKIP {QSKIP}
LIMIT {QLIMIT}
MATCH pin-[:PINS_ASSET]->asset
RETURN pin, author, board, asset,
       LENGTH(n<-[:LIKED_BY]-pin) > 0 AS has_liked
```



Retro 60s hair makeup

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Lessons learned

- OGM-layers are easy to use but hard to optimize
- lazy loading models costs performance
- query optimized secondary index-structures have to be planed from the beginning
- graphs are awesome!

That's it!

Thank you!

Questions?