Database Systems

The Social Networks: Graphs
Announcement

- Bonus 5 posted
- T-shirt design voting today!
SQL: Just a little bit more
SQL and Advanced SQL

http://sqlzoo.net/
Join

http://sqlzoo.net/wiki/The_JOIN_operation
# 1

SELECT matchid, player FROM goal WHERE teamid = 'GER'
#2

```
SELECT id, stadium, team1, team2
FROM game
WHERE game.id = 1012
```
SELECT player, teamid, stadium, mdate
FROM game JOIN goal ON (id=matchid)
where teamid='GER'
SELECT team1, team2, player
FROM game JOIN goal ON (id=matchid)
WHERE player LIKE 'Mario%'
#5

SELECT player, teamid, coach, gtime
FROM goal JOIN eteam on (teamid=id)
WHERE gtime<=10
SELECT mdate, teamname
FROM game JOIN eteam on (team1=eteam.id)
WHERE coach like '%Fernando Santos%'
#7

SELECT player 
FROM game JOIN goal on (id=matchid) 
where stadium like 'National Stadium, Warsaw'
More Join

http://sqlzoo.net/wiki/More_JOIN_operations
# 7

select name
from actor join casting on (id = actorid)
where movieid=11768
select name
from (movie join casting on (movie.id = casting.movieid)) join actor on (casting.actorid = actor.id)
where title = 'Alien'
# 9

```sql
select title
from (movie join casting on (movie.id = casting.movieid)) join actor on (casting.actorid = actor.id)
where name = 'Harrison Ford'
```
The Social Networks

Fun reading: http://www.factslides.com/s-Facebook
https://www.youtube.com/watch?v=HMpWXQpogqI
Facebook vs Myspace

How facebook beat myspace?

Further readings:
How Facebook Beat Myspace?

- Same audience, social media revolution
- The failure of professional management (by News Corps.) v.s White Space management (letting the marketplace decide)
- What do users want? User-driven apps and functionalities
Facebook was able to overtake MySpace because Facebook “perfected” the social networking concept, whereas MySpace just introduced people to it.

— Mike Jones, formerly the head of MySpace.

Read more: http://www.digitaltrends.com/social-media/former-myspace-ceo-reveals-what-facebook-did-right-to-dominate-social-media/#ixzz44yAwZx91

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How Facebook Beat Myspace?

- MySpace put up barriers to user enjoyment by forcing members to use anonymous pseudonyms in place of their real identities.
- As of March 2015, Facebook has 1.44 billion users a month, Myspace has 50 million
- Which ones are the leading social networks worldwide?

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Users (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>1,550</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>900</td>
</tr>
<tr>
<td>QQ</td>
<td>860</td>
</tr>
<tr>
<td>Facebook Messenger</td>
<td>800</td>
</tr>
<tr>
<td>QZone</td>
<td>653</td>
</tr>
<tr>
<td>WeChat</td>
<td>650</td>
</tr>
<tr>
<td>Tumblr</td>
<td>555</td>
</tr>
<tr>
<td>Instagram</td>
<td>400</td>
</tr>
<tr>
<td>Twitter</td>
<td>320</td>
</tr>
</tbody>
</table>
Has google+ really died?

- The number of truly active users on Google+ is significantly less than 1% of the total 2.2 billion Google users, according to a study published on April 14, 2015.
- Google has consistently failed to get to heart of social. People prefer Facebook to Google+, fundamentally because Google’s approach to social isn’t fun.
- A head-on challenge to Facebook was inevitably unsuccessful.
- Failure to offer something genuinely new

Further reading: http://www.forbes.com/sites/stevedenning/2015/04/23/has-google-really-died/#34f09f5b16e9 http://www.forbes.com/sites/stevedenning/2015/04/17/five-reasons-why-google-died/#6542a4dd33c0
Has google+ really died?

- Nov, 2015. Major redesign of Google+
- Communities and Collections functionality: narrow the service's scope into interest-based networking
Future of Facebook?

- Virtual reality: Gear VR; Oculus Rift.
- AI
Mark Zuckerberg
Founder & CEO, Facebook

https://www.youtube.com/watch?v=8vQggbWtjOo
THANKS!

Any questions?

You can find me at
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http://www.sci.utah.edu/~beiwang/teaching/cs1060.html
Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
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