

SCIENTIFIC SOCIAL NETWORK

CHENG WANG, LU LI, HONGJUN LIU, ZHEXIN QIU

SCIENTIST'S FACEBOOK

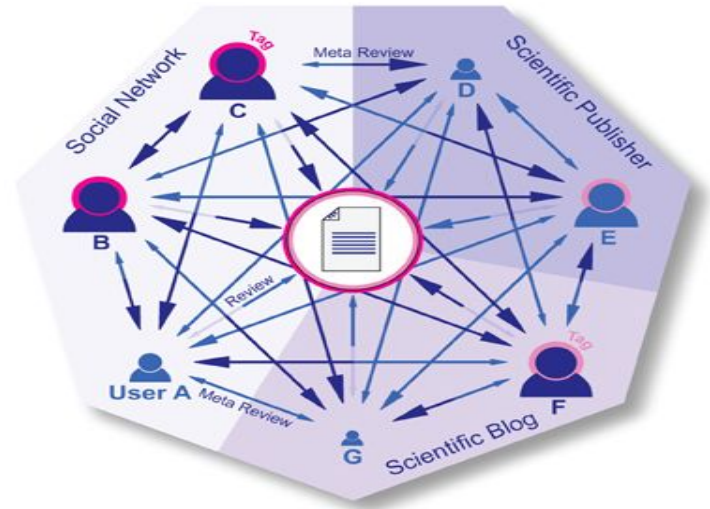
- ▶ Scientists may send any post about their research
- ▶ Scientists may follow or comment others' posts
- ▶ Scientists may search users and posts by keywords
- ▶ Other features

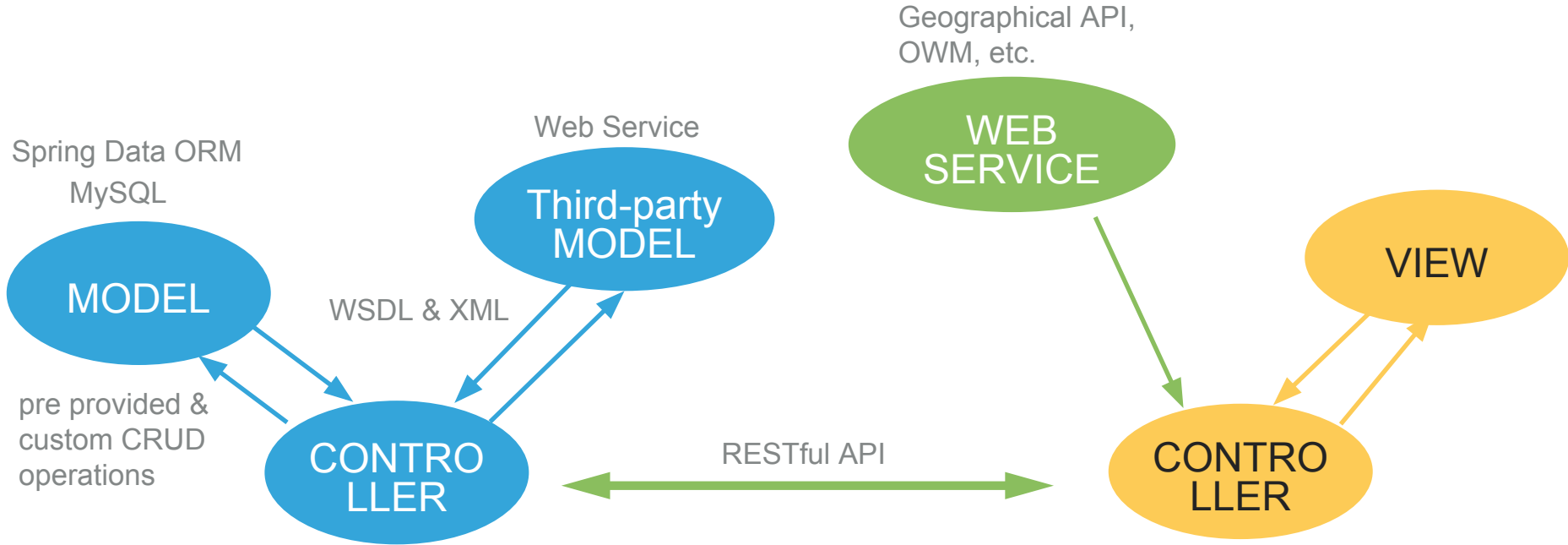
SCIENTIST'S FACEBOOK

- ▶ Apache project for scientists to socialize and communicate about latest research development or discovery
- ▶ Technology stack:
 - ▶ front-end: HTML, CSS (bootstrap), JavaScript (jQuery)
 - ▶ back-end: Java, MySQL, Scala
 - ▶ framework: play!

WHY ANOTHER SOCIAL NETWORK

- ▶ Purer environment for scientific work
- ▶ Social is central
- ▶ Development is fun

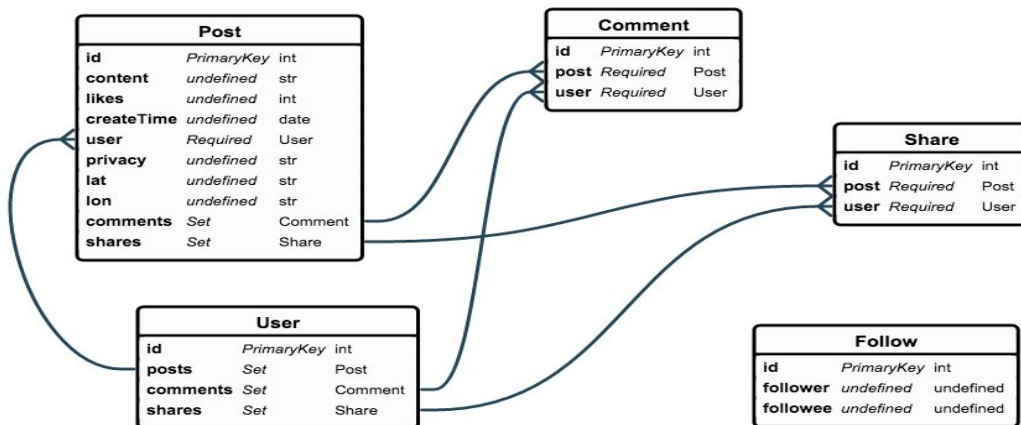




DECOUPLED EASES COOPERATION

SCHEMA AND API

43	GET	/post/user/\$id<[/]+>
44	GET	/post/new
45	POST	/post
46	POST	/post/like
47	GET	/post/delete/\$id<[/]+>
48	POST	/post/edit
49	GET	/post/popular
50	GET	/post/delete/user/\$id<[/]+>
51	GET	/post/follow/\$id<[/]+>
52	GET	/share/new
53	POST	/share
54	GET	/share/user/\$id<[/]+>
55	GET	/share/delete/\$postId<[/]+>
56	GET	/share/deleteAll
57	GET	/follow/new
58	POST	/follow
59	GET	/follow/user/\$id<[/]+>
60	GET	/follow/all
61	GET	/follow/delete/\$followId<[/]+>
62	POST	/comment
63	GET	/comment/post/\$id<[/]+>
64	POST	/search/user/criteria
65	GET	/search/user/fuzzy/\$partial<[/]+>
66	GET	/search/post/\$keyword<[/]+>
67	GET	/user/autocomplete/firstname/\$query<[/]+>
68	GET	/user/autocomplete/lastname/\$query<[/]+>
69	GET	/user/autocomplete/email/\$query<[/]+>
70	POST	/user/autocomplete/exact



SOUNDEX('Williams') === 'W452'

and

SOUNDEX('Wlliams') === 'W452'

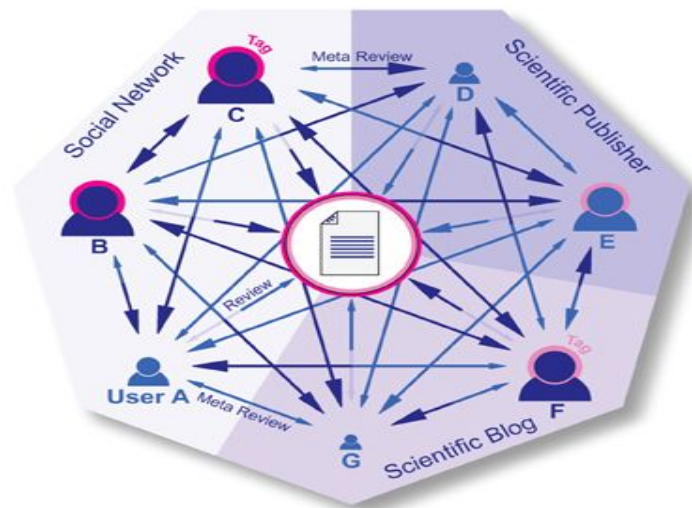
DESIGN AND API

- ▶ API is consistent with the back-end
- ▶ Totally decouple controller/View and Models
 - ▶ Speed up development
 - ▶ Hide the backend data implementation details
 - ▶ Easier to add middleware between back-end and front-end
- ▶ Front-end serves only static resources.
- ▶ Browser front-end: bootstrap and jQuery with plugins.

DEMO

CONCLUSION & FUTURE WORK

- ▶ Access control & encryption
- ▶ Friend list / mailing box
- ▶ Better searching implementation
- ▶ Posts and friends recommendation based on research interests.
- ▶ Cache in the front-end
- ▶ And more....



Thank you
Q & A