Design and implementation of a social networking platform for cloud deployment specialists

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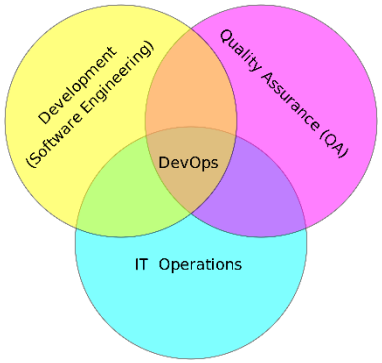
Agenda

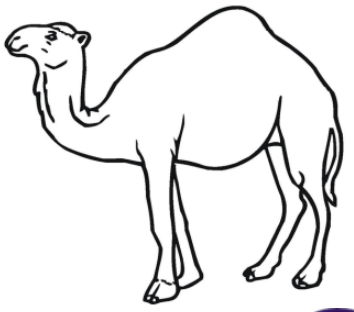
- Motivation
- Design and Implementation
- Evaluation

Motivation

Context



C is for Camel



PAASAGE

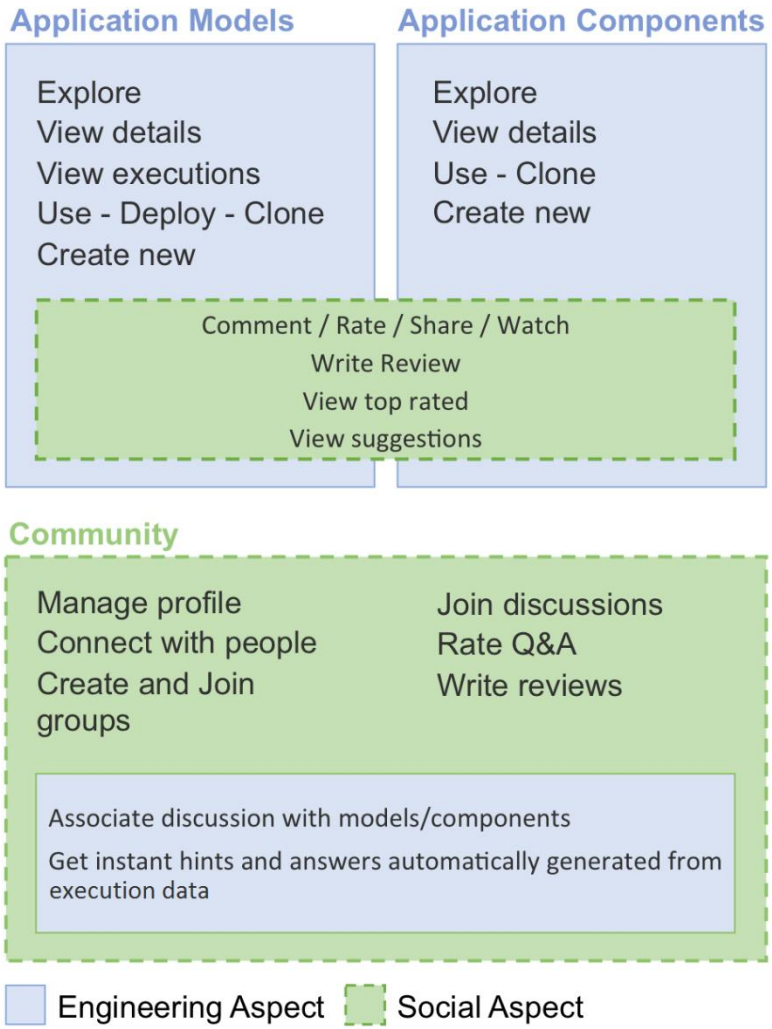
MDE

CDO
The Model Repository

IBM Bluemix

CHEF™

Combining Social and engineering Aspects

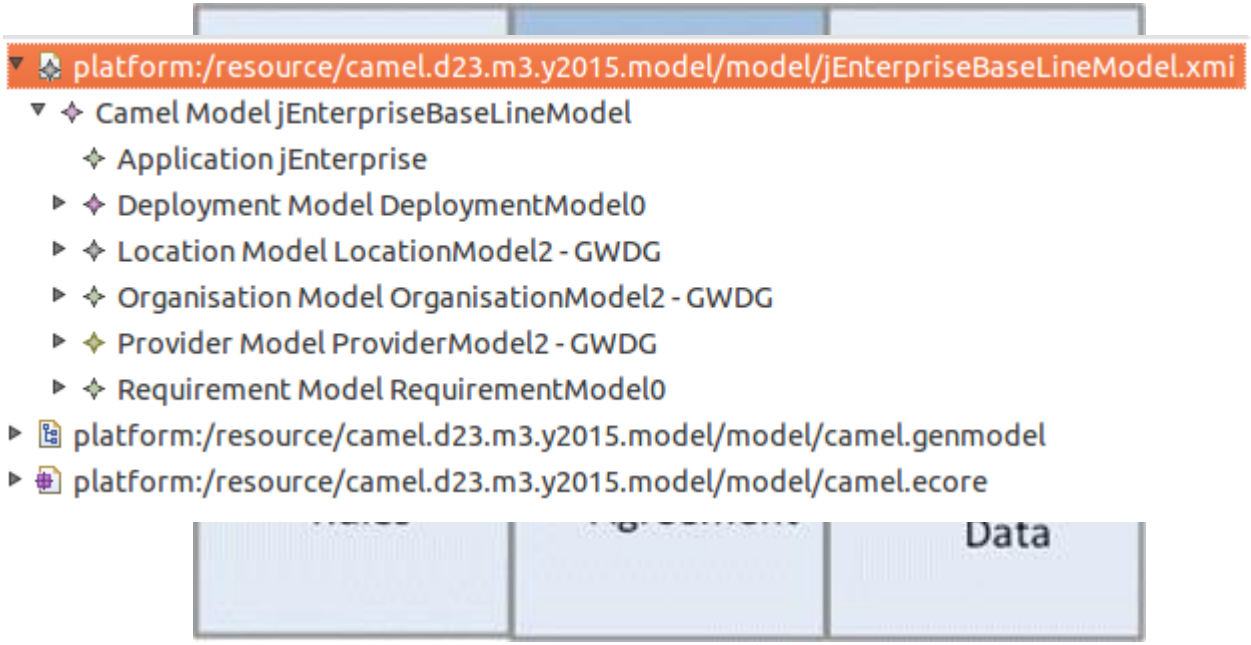


Contributions

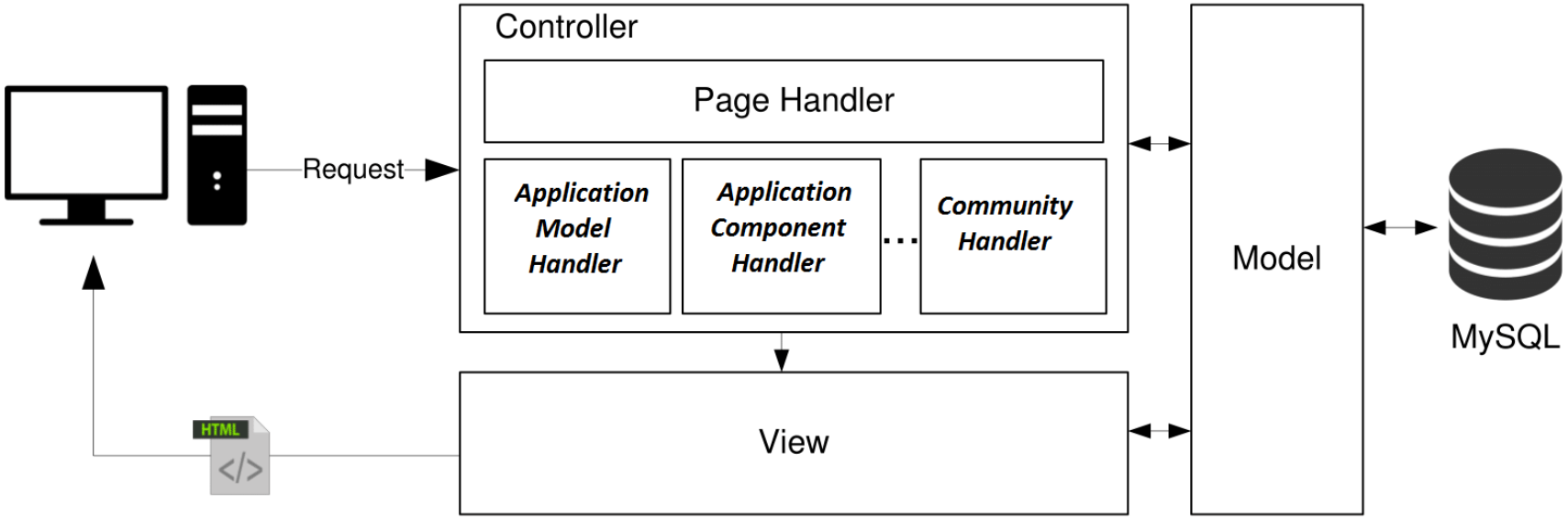
- A social networking platform (SNP) for cloud deployment specialists
- Extensive usability evaluation
- Addressing scalability aspects
- Applying natural language processing (NLP) techniques on crowd-sourced Q&A data.

Design and Implementation

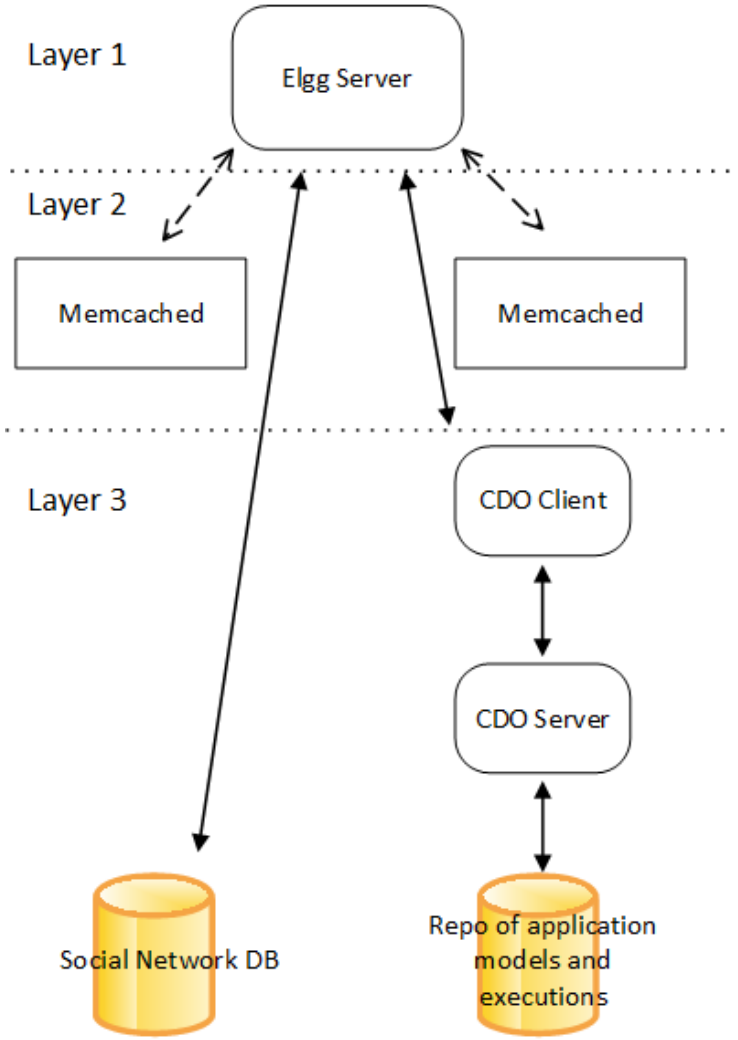
Modeling Applications: CAMEL



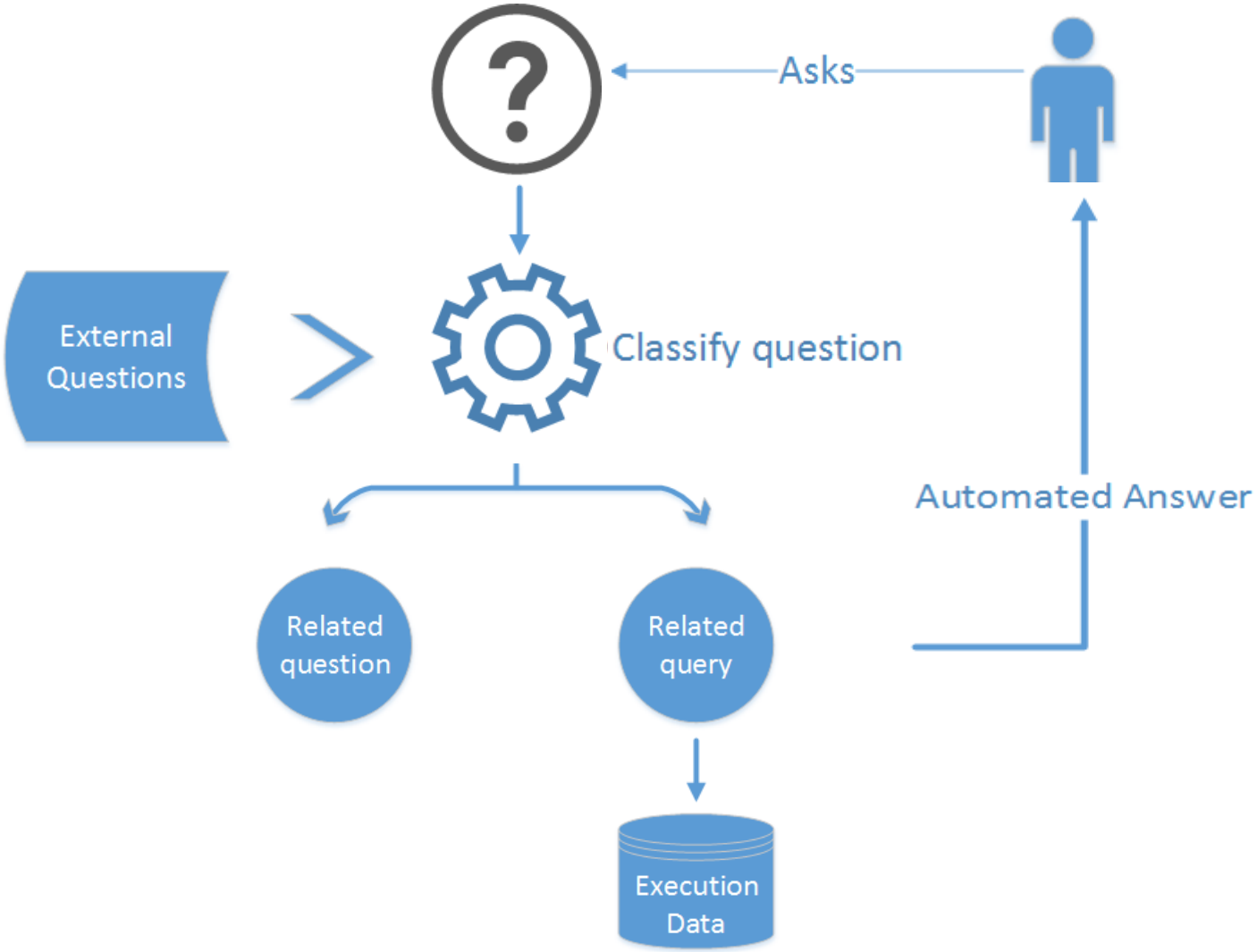
Social Networking Engine Architecture



System Architecture

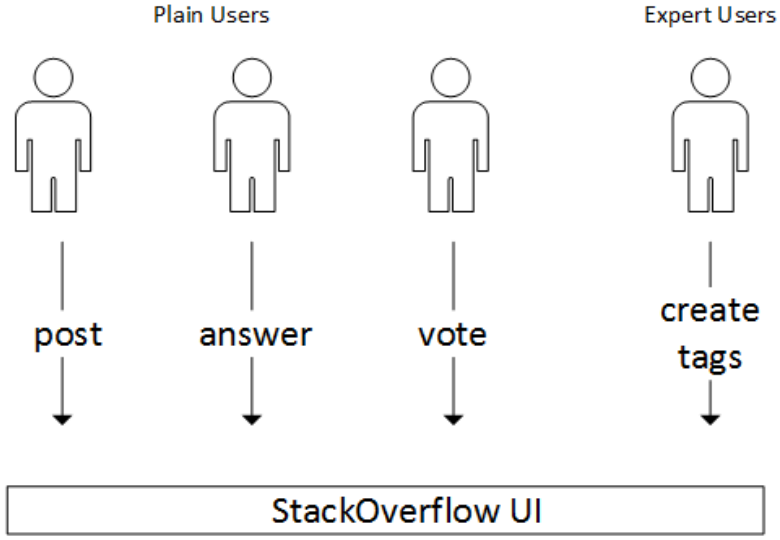


Automated Replies (1/2)



Automated Replies (2/2)

StackOverflow Community



How Scalable is SQLite? [closed]

147

I recently read this Question about SQLite vs MySQL and the answer pointed out that SQLite doesn't scale well and the official website sort-of confirms this, however.

How scalable is SQLite and what are its upper most limits?

sqlite scalability

share edit flag

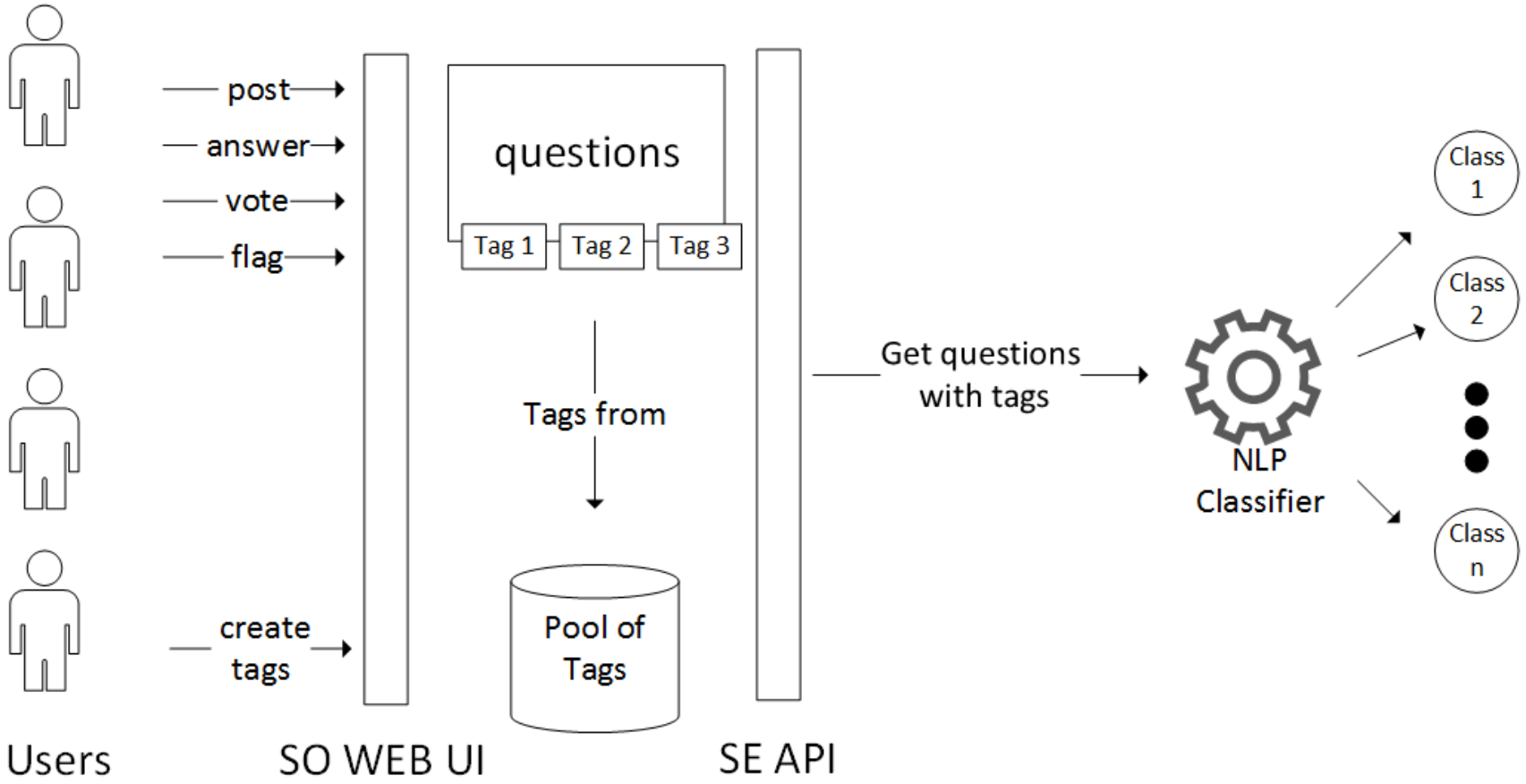
65

edited Oct 27 '09 at 1:20
Sinan Ünür
86.5k • 10 • 130 • 258

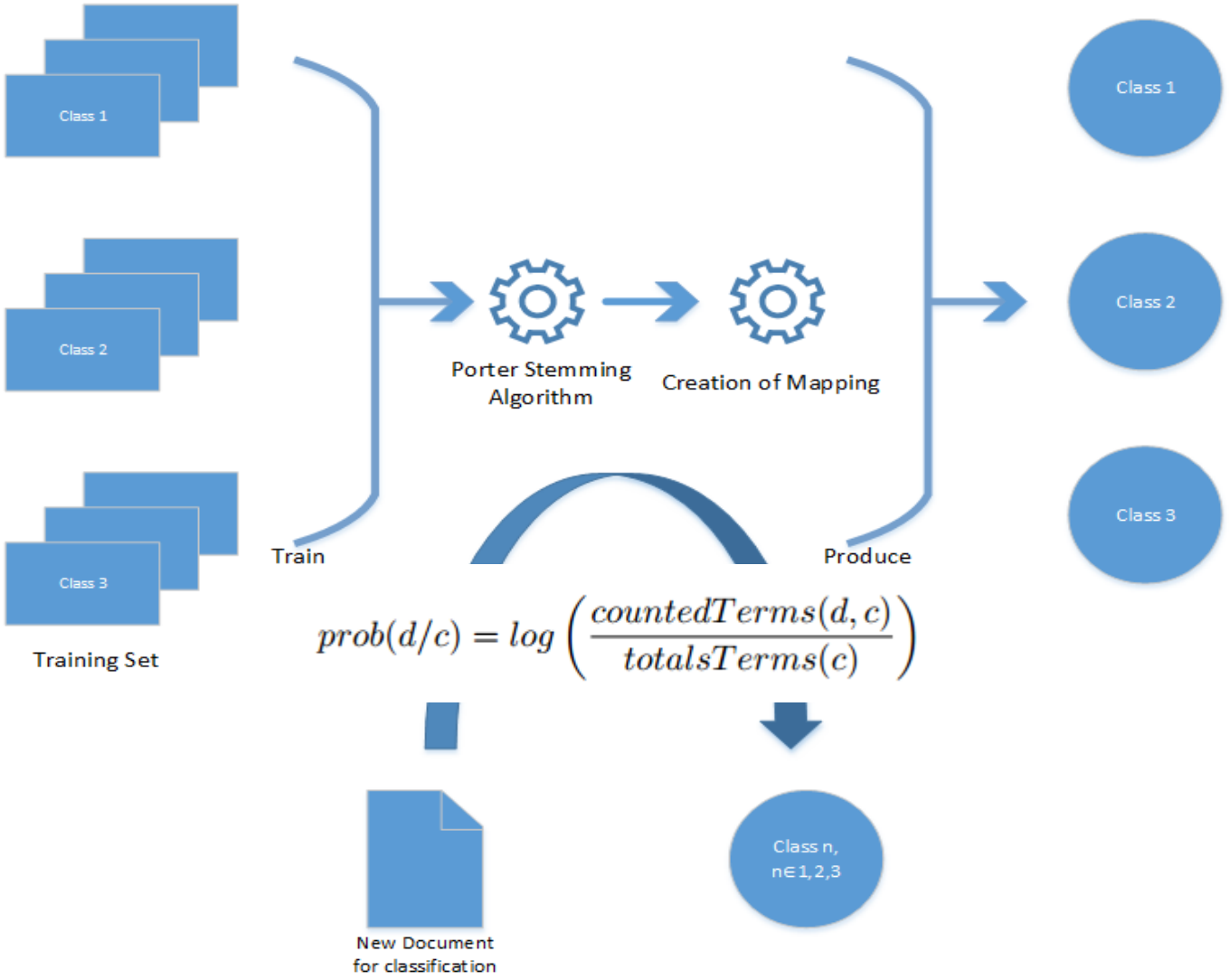
asked Sep 10 '08 at 18:47
GateKiller
23k • 50 • 139 • 183

asked 7 years ago
viewed 30107 times
active 2 years ago

NLP Topic Classification (1/2)



NLP Topic Classification (2/2)



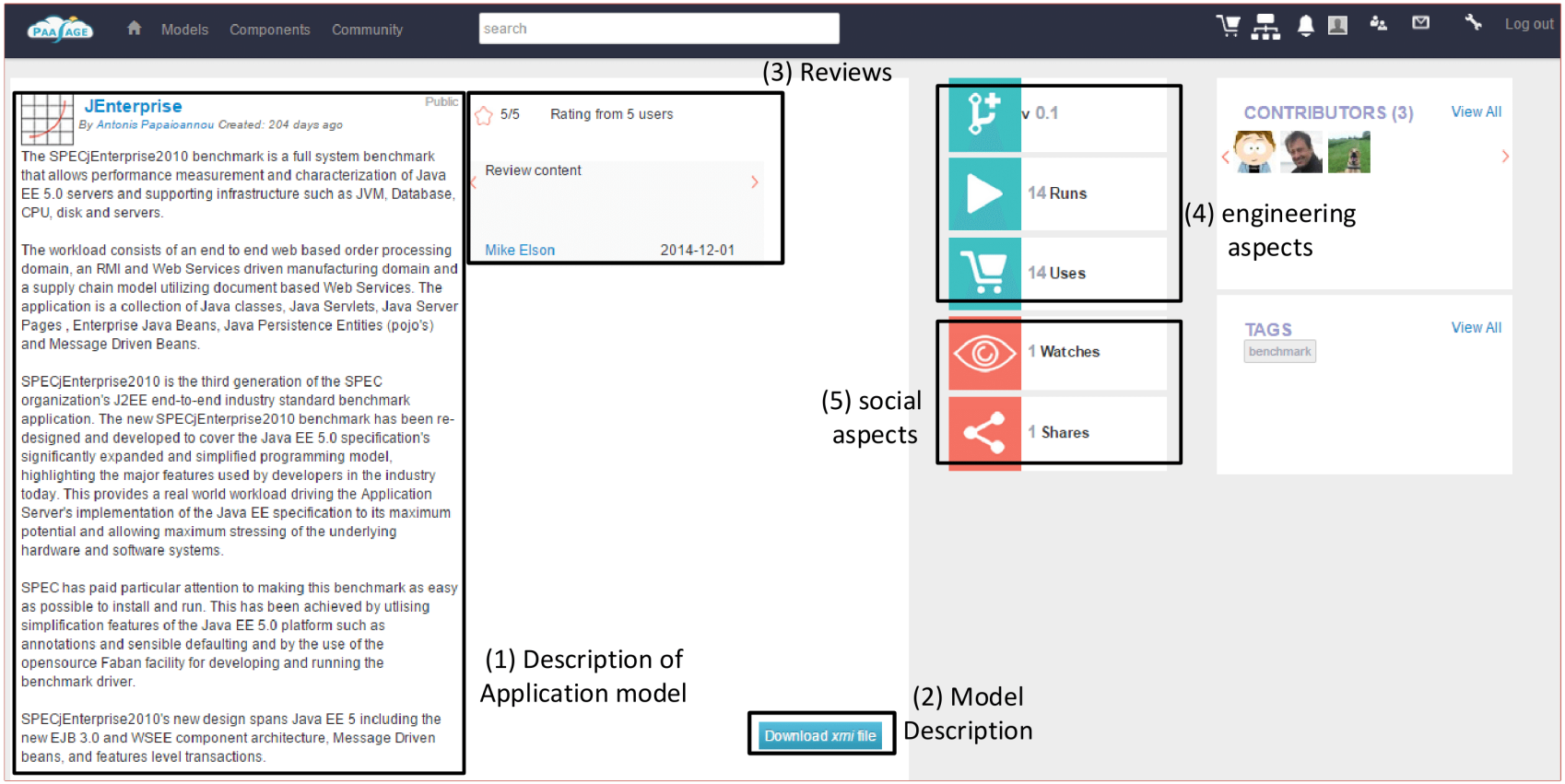
Evaluation

Usability Evaluation Process

- Targeting usability of UI design
- User evaluation conducted
- Results point to user requirements and user feedback

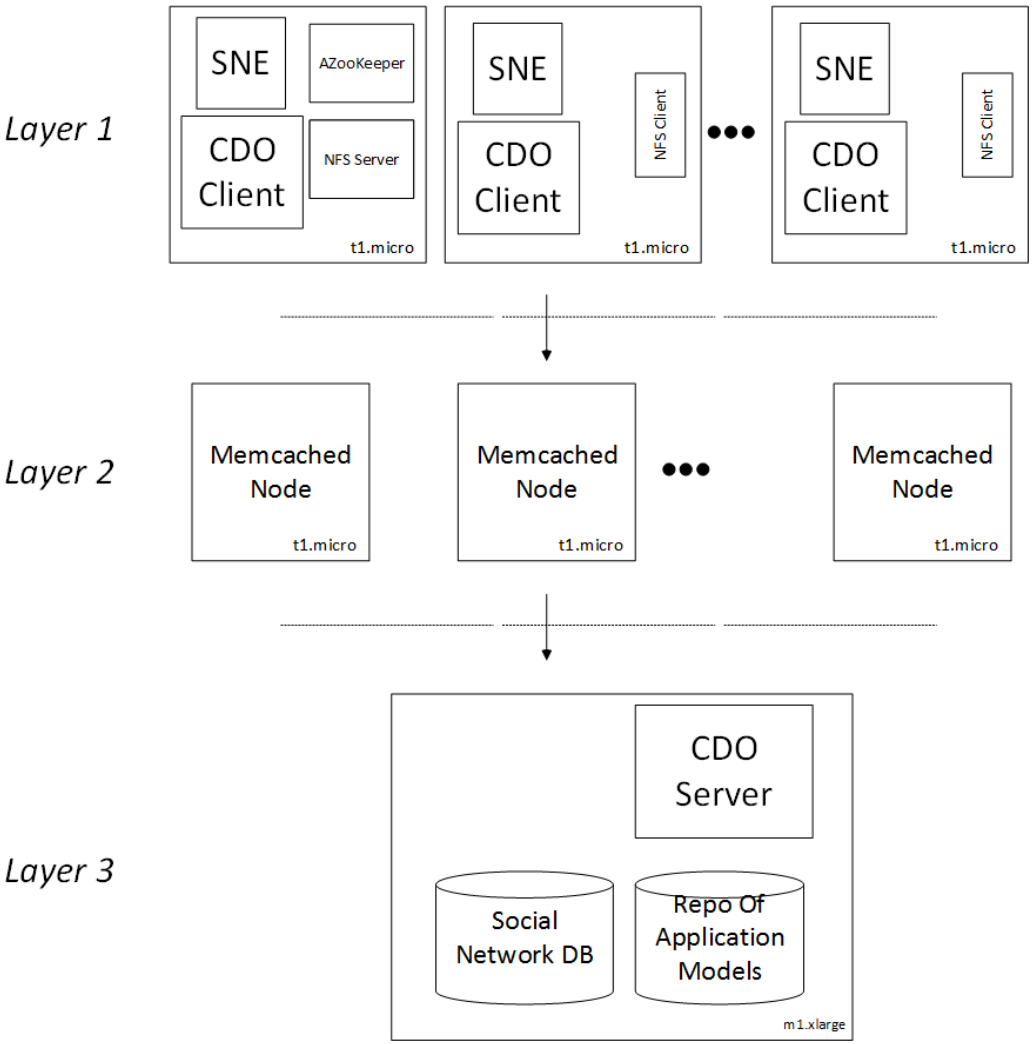
Gender			**Age**		
Male	12	80%	<30	6	40%
Female	3	20%	30 - 40	9	53.3%
TOTAL	15	100%	Undeclared	1	6.7%
			TOTAL	15	100.0%
DevOps expertise			**Social networking expertise**		
0-1 years	3	20%	0-1 years	1	6.7%
1-2 years	1	6.7%	1-2 years	0	0.0%
>2 years	11	73.3%	>2 years	14	93.3%
TOTAL	15	100.00%	**TOTAL**	15	100.00%
Professional expertise*			**Familiarity with PaaSage objectives**		
Software Engineer	13	86.7%	Limited	5	33.3%
Researcher	6	40%	Medium	4	26.7%
Solutions Architect	2	13.3%	High	6	40.0%
Other	1	6.67%	**TOTAL**	15	100.0%

User Interface of Application Models

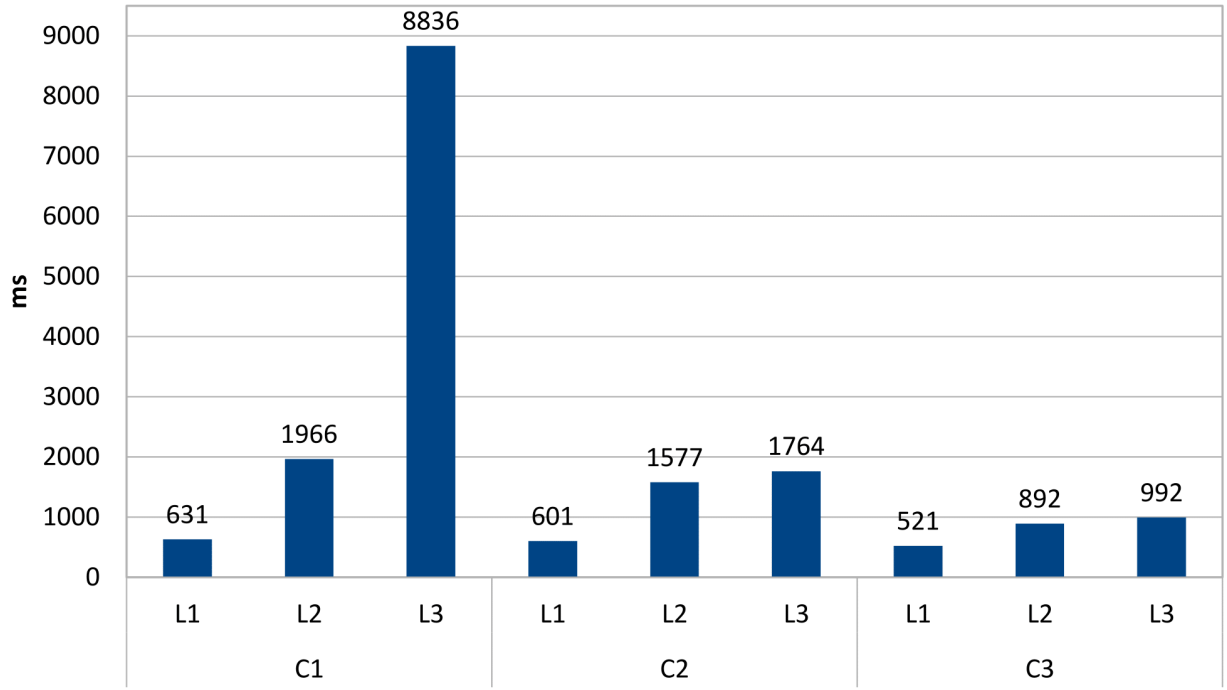


User's Feedback

Evaluated Architecture



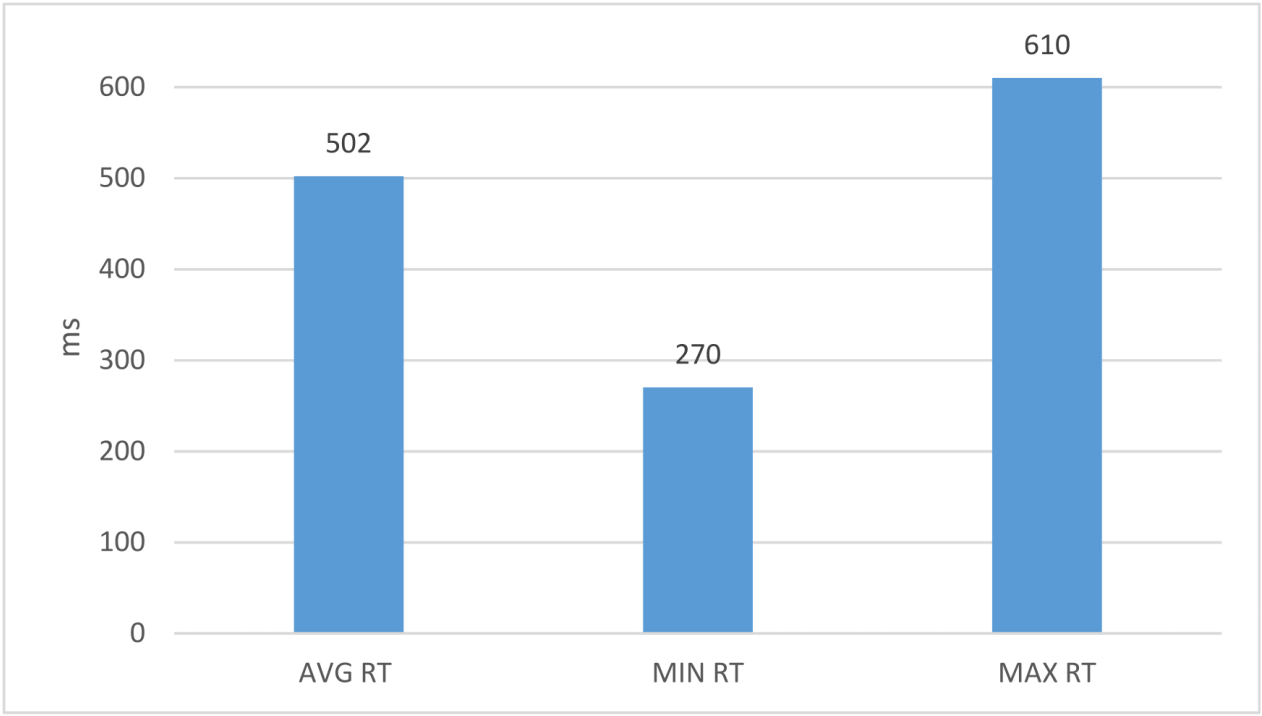
Response Time, adding Memcaches (1/2)



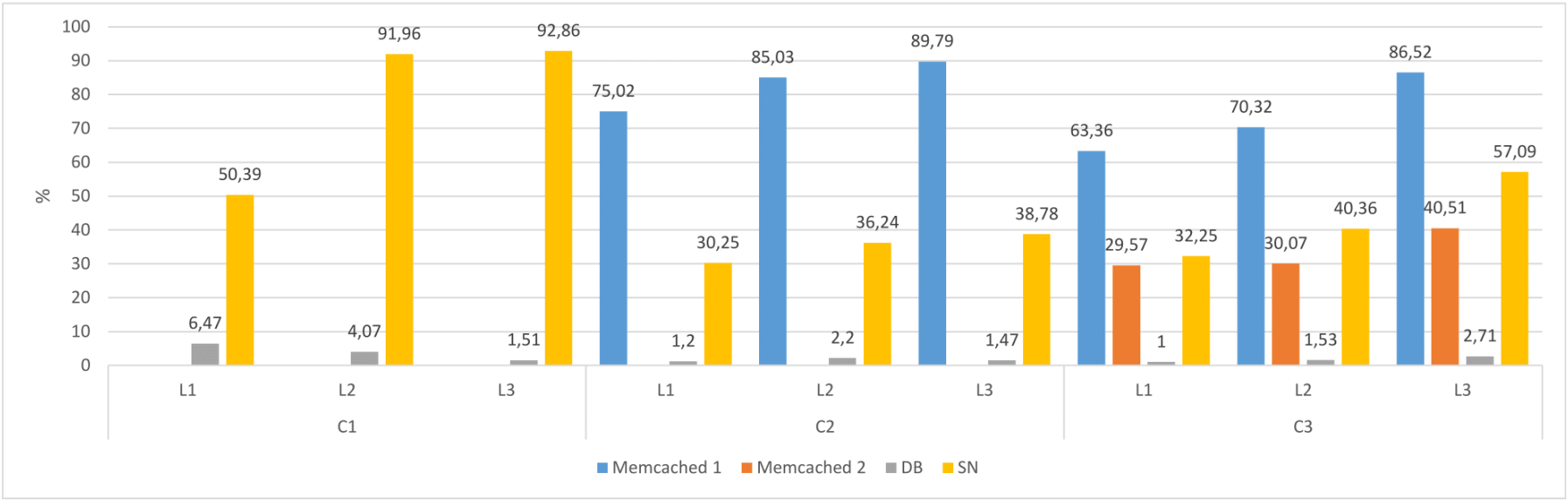
L1	10 users request 2 applications
L2	10 users request 4 applications
L3	10 users request 8 applications

C1	No memcached node
C2	One memcached node
C3	Two Memcached node

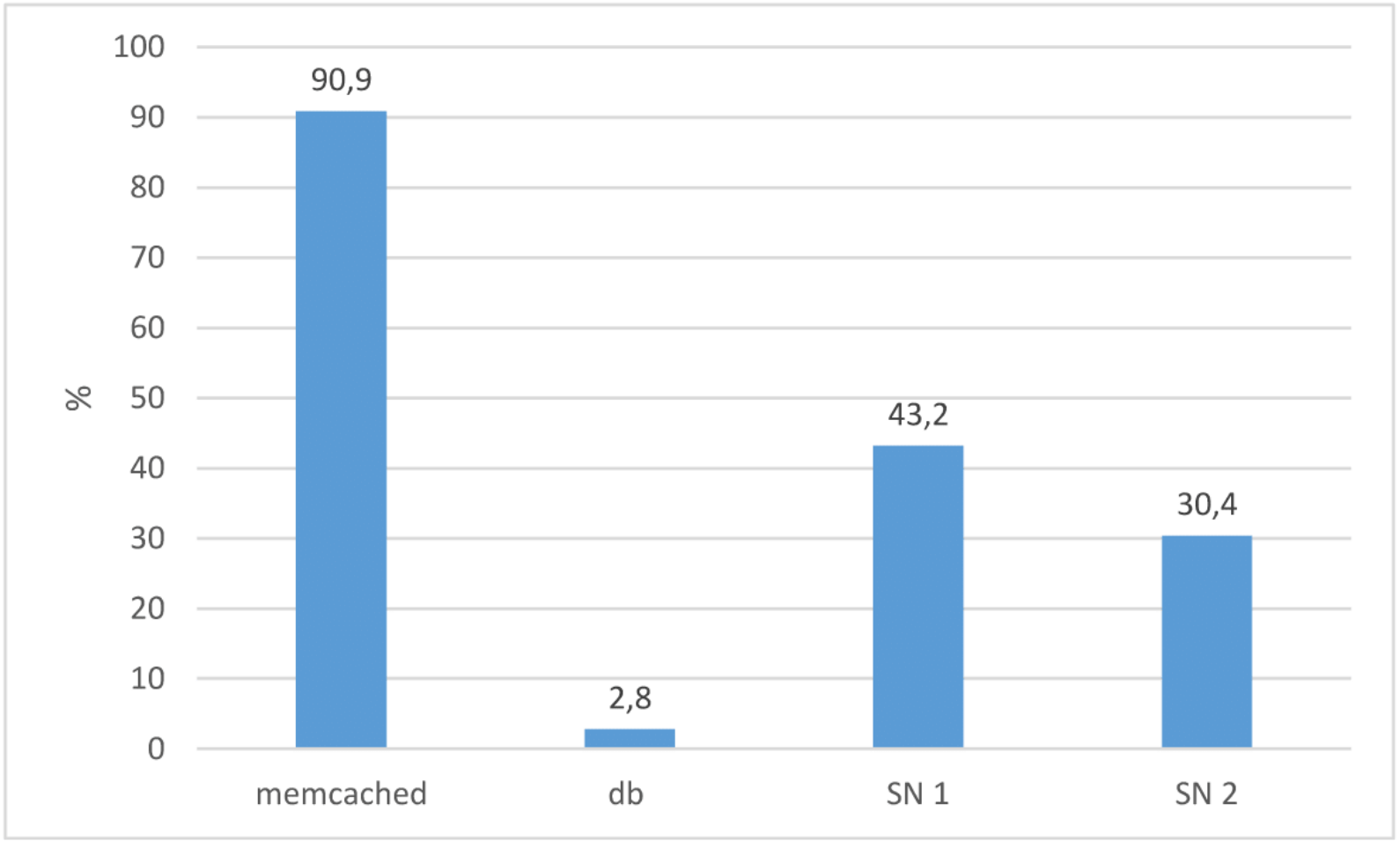
Response Time, adding SNE (2/2)



CPU Utilization, adding Memcaches (1/2)

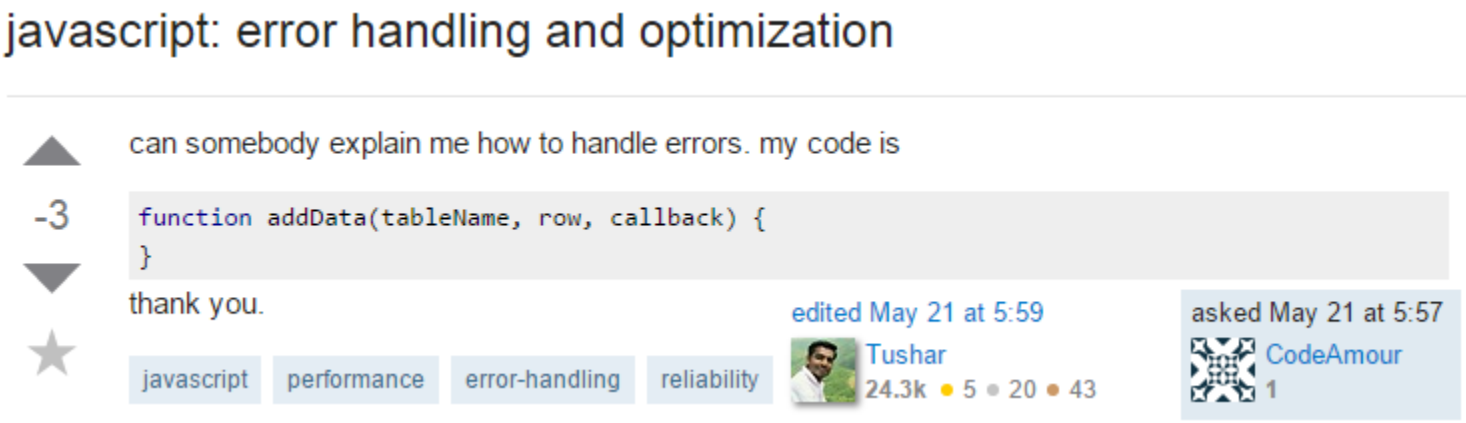


CPU Utilization, adding SNE (2/2)



NLP classification evaluation

class / class	reliability	design	optimazation	performance	scalability
reliability	**21**	0	8	1	0
design	2	**15**	8	3	2
optimization	2	3	**15**	9	1
performance	2	1	17	**9**	1
scalability	10	6	3	3	**8**



Conclusion

- Contributions
  - Extensive User Evaluation
  - A social network User Interface is implemented for DevOps cloud deployment specialists.
  - A scalable system architecture of our SNP is presented.
  - The SN Platform can perform NLP classification on the user's input.

Thank you