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

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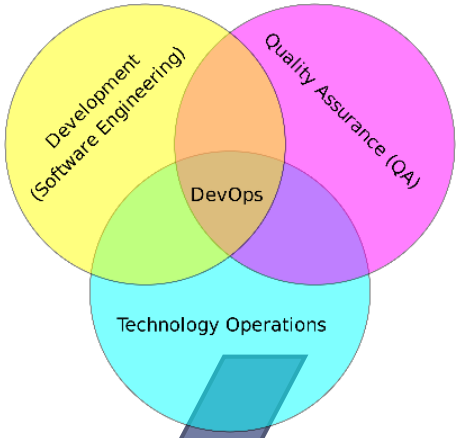
Agenda

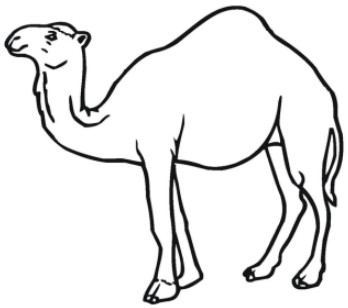
- Motivation
- Design and Implementation
- Evaluation

Motivation

Context



C is for Camel



PAASAGE

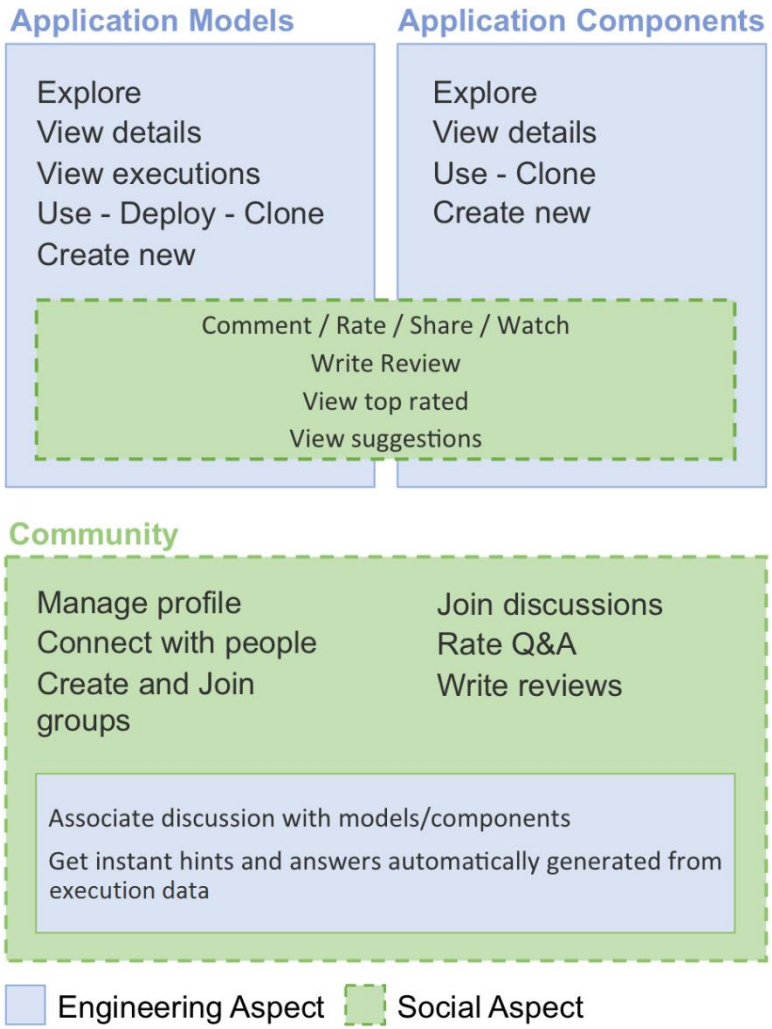
MDE

CDO
The Model Repository

IBM Bluemix

CHEF™

Research goal

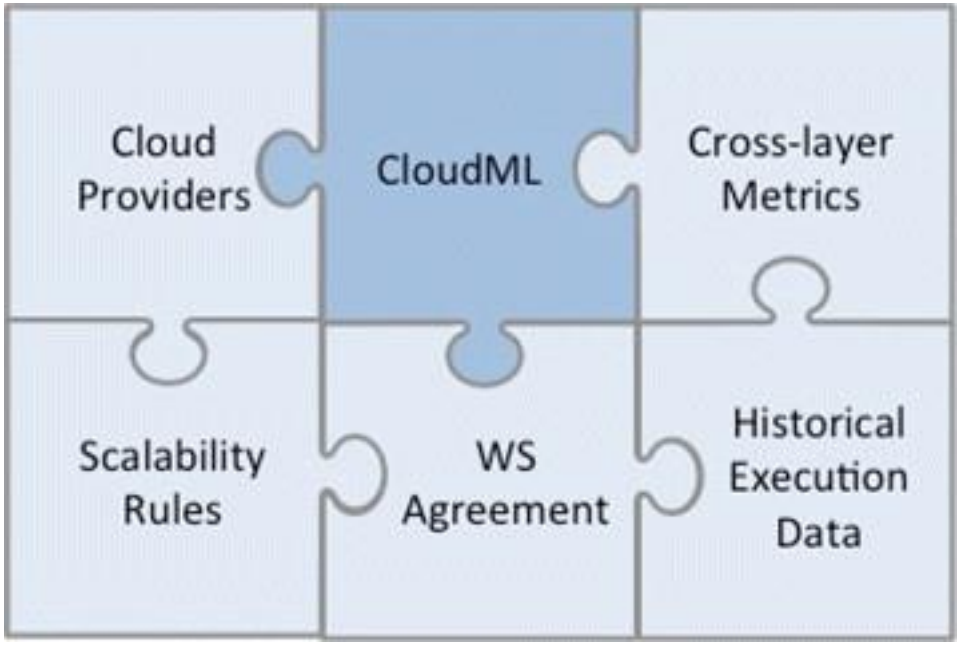


Contributions

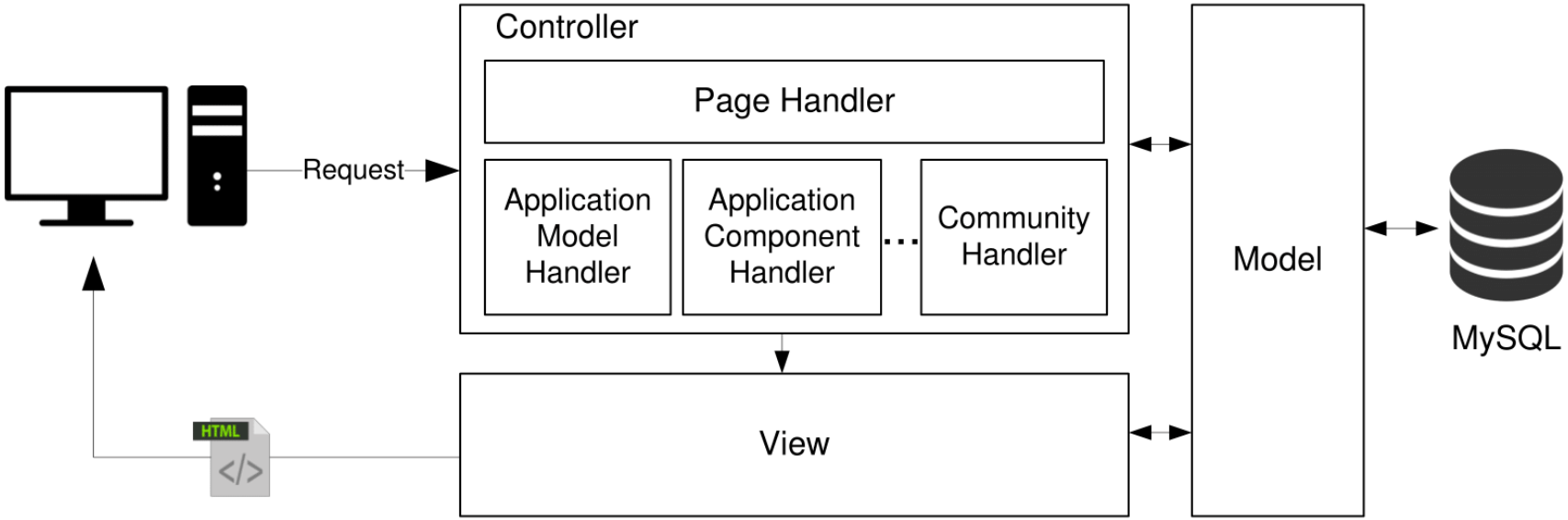
- A Social Networking Platform (SNP) for Cloud Deployment specialists
- Extensive usability evaluation
- Addressing scalability aspects
- Applying Natural Language Processing (NLP) techniques on crowd-sourced Q&A data.

Design and Implementation

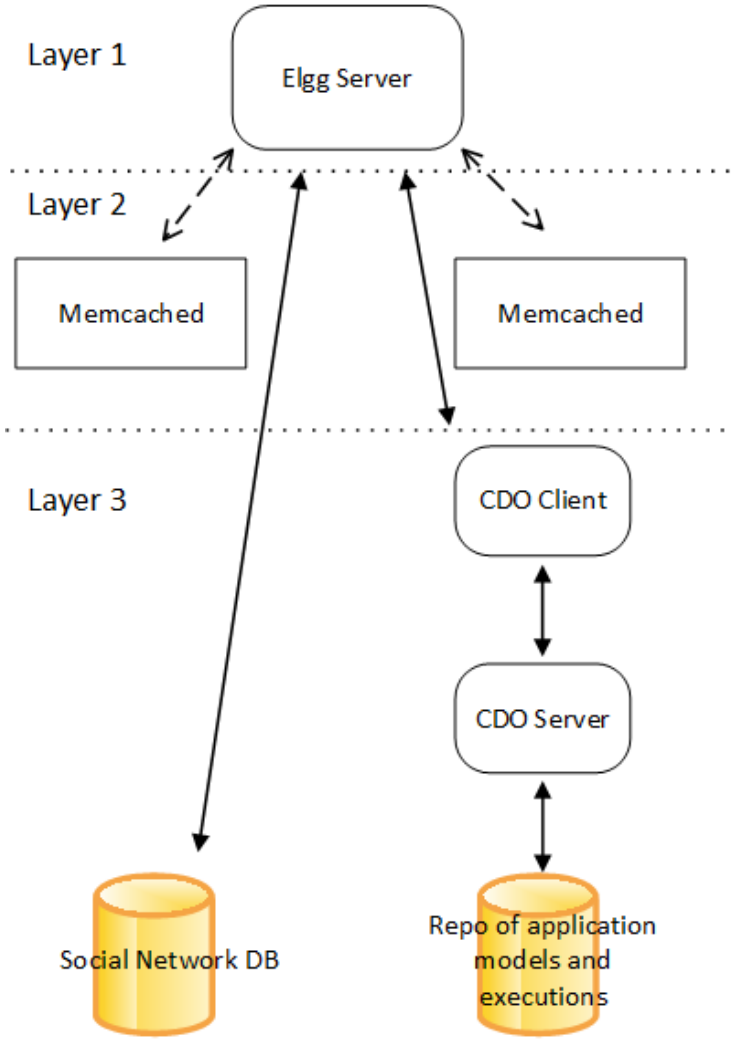
Modeling Applications



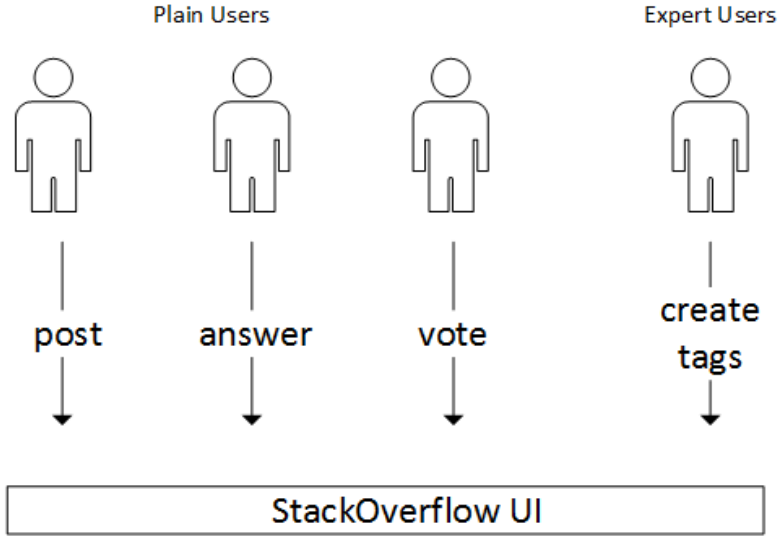
Social Networking Engine Architecture



System Architecture



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

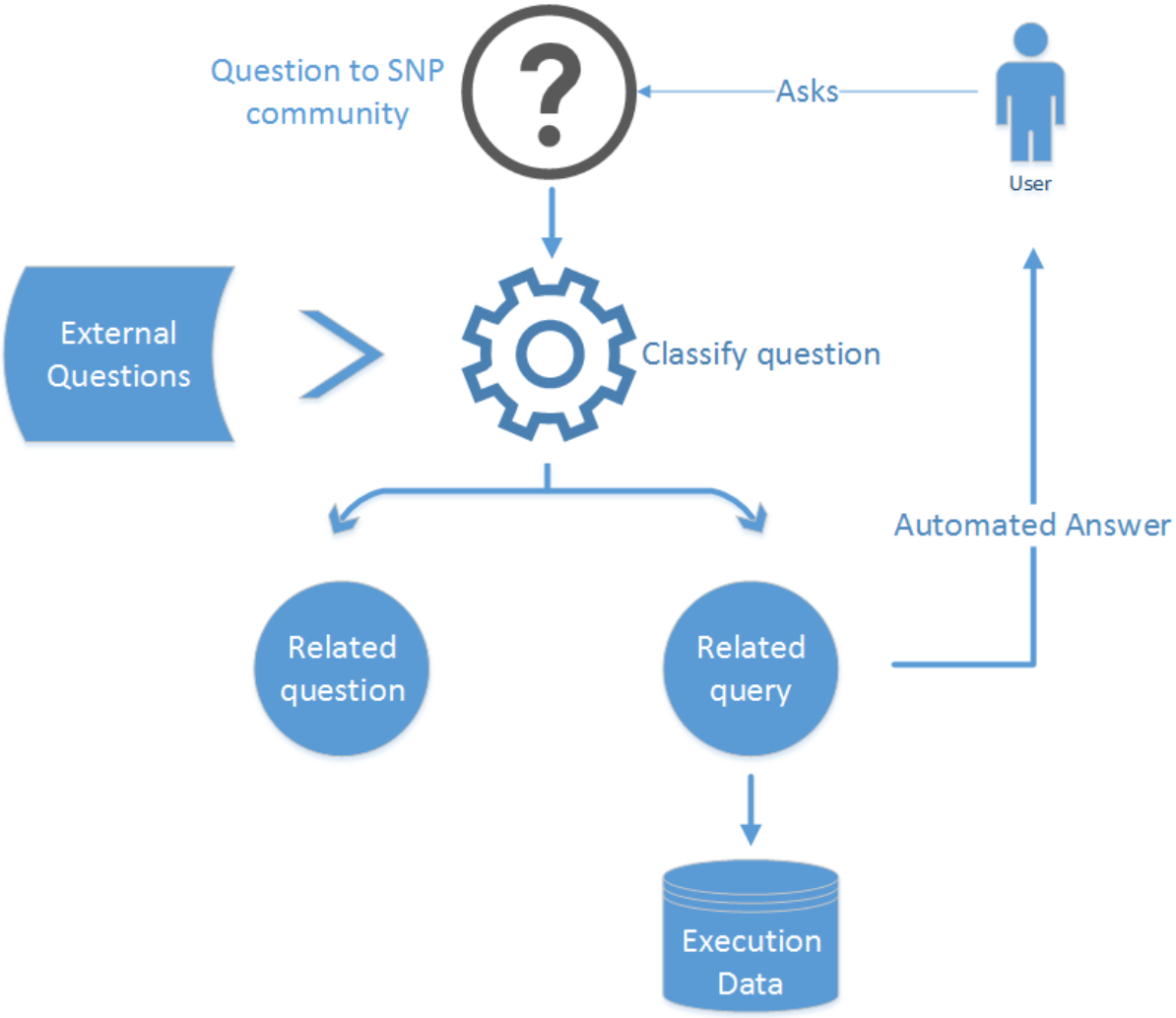
65

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

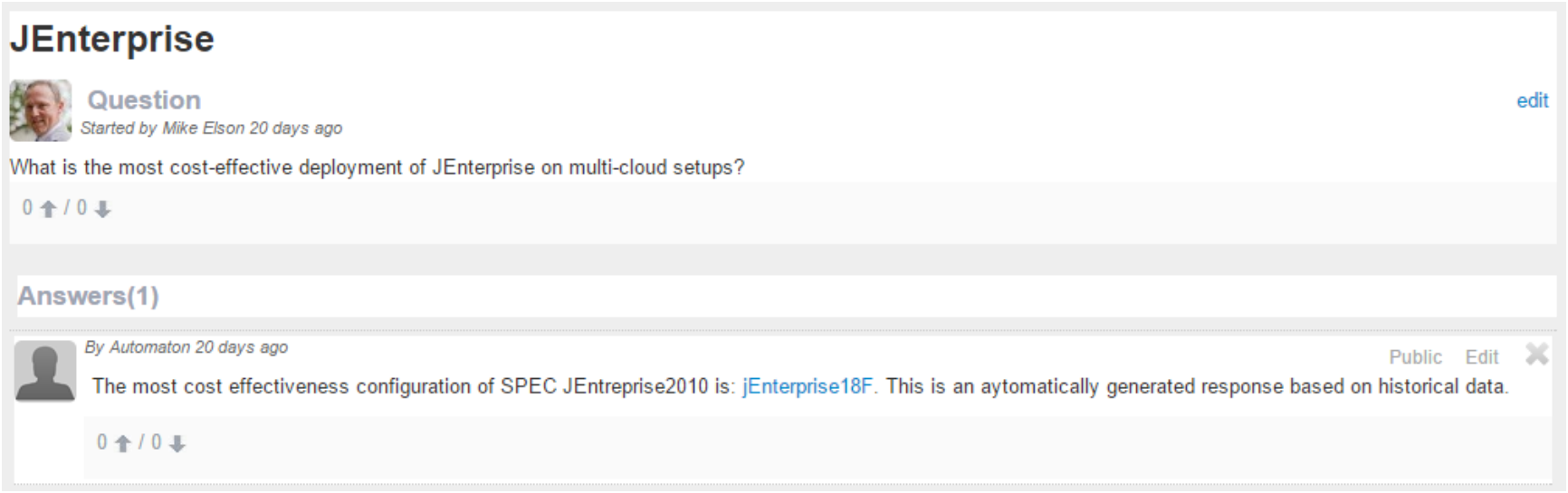
asked Sep 10 '08 at 18:47
GateKiller
23k • 50 • 139 • 183

asked 7 years ago
viewed 30107 times
active 2 years ago

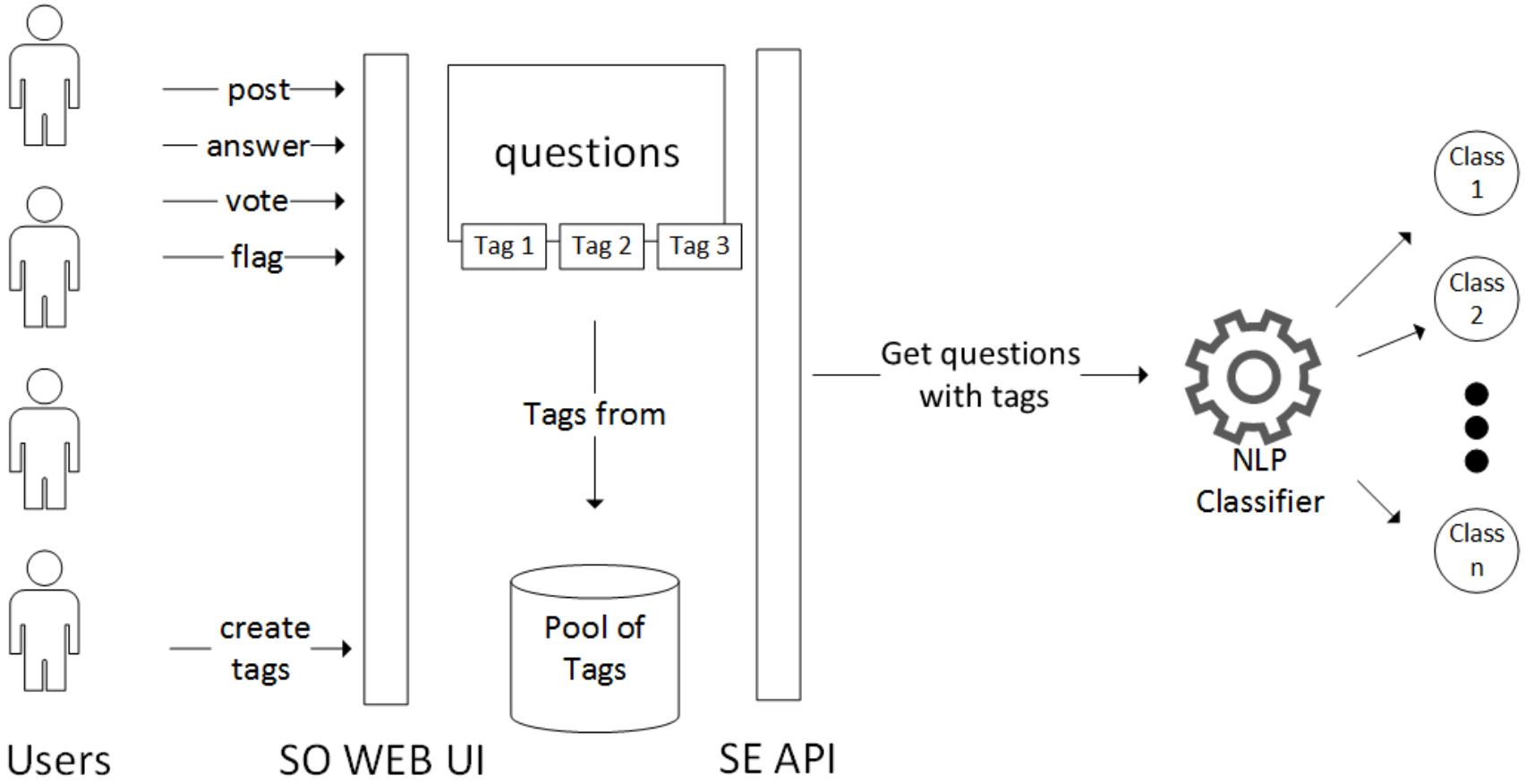
Automated Replies



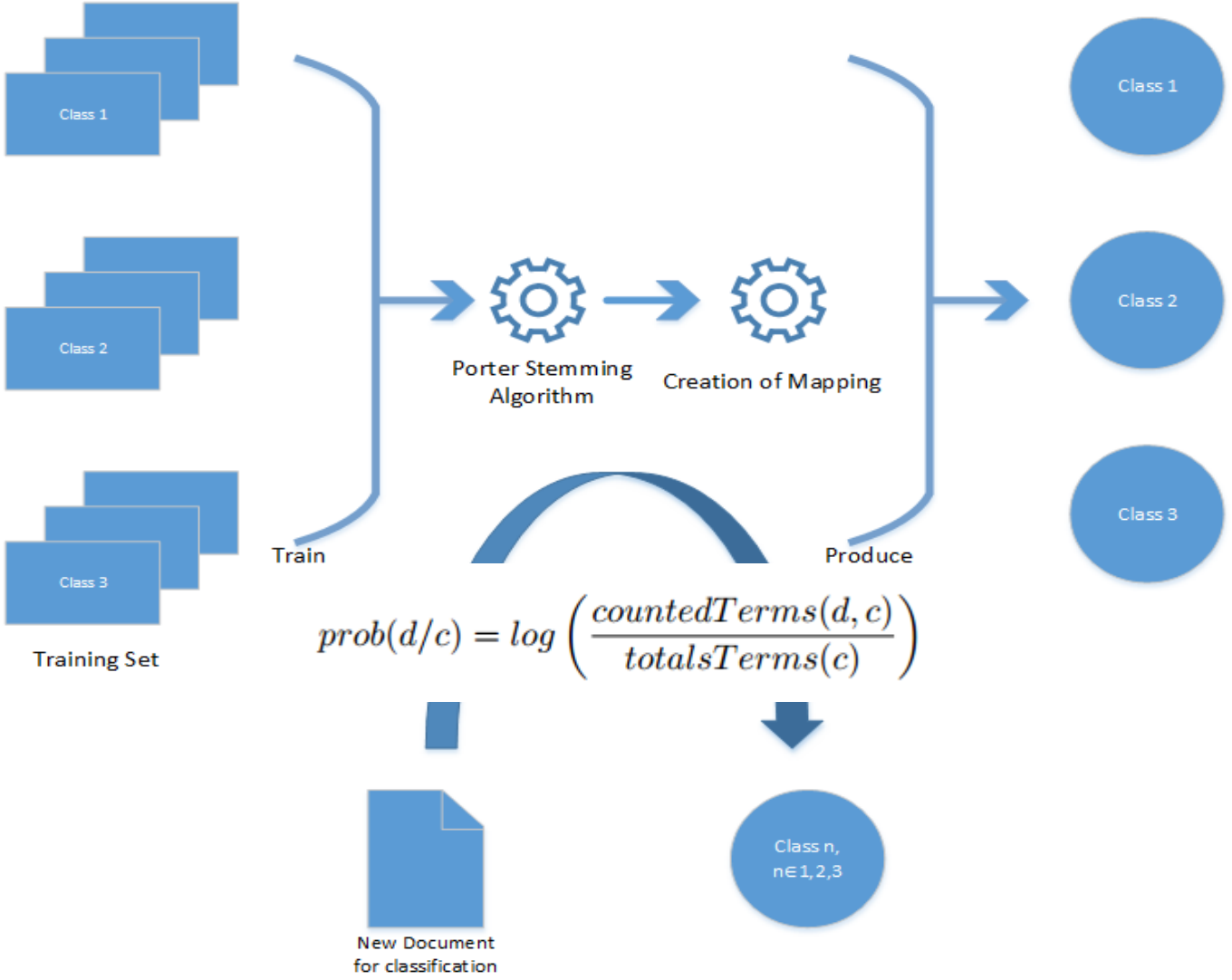
Automated Replies



NLP Classifier



NLP Topic Classification

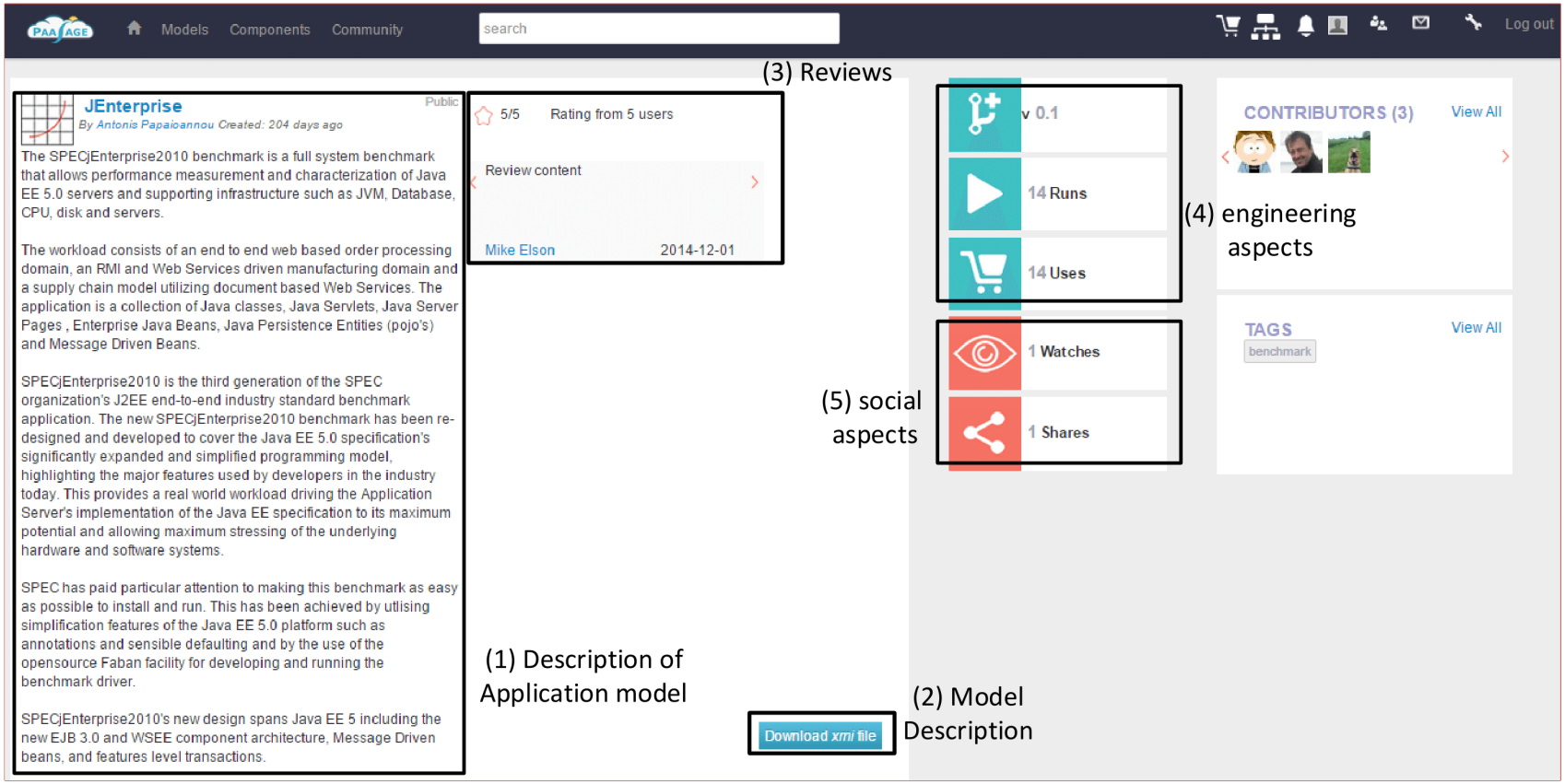


Evaluation

Usability Evaluation Process

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

User Interface of Application Models



User's Requirements

View and share source code

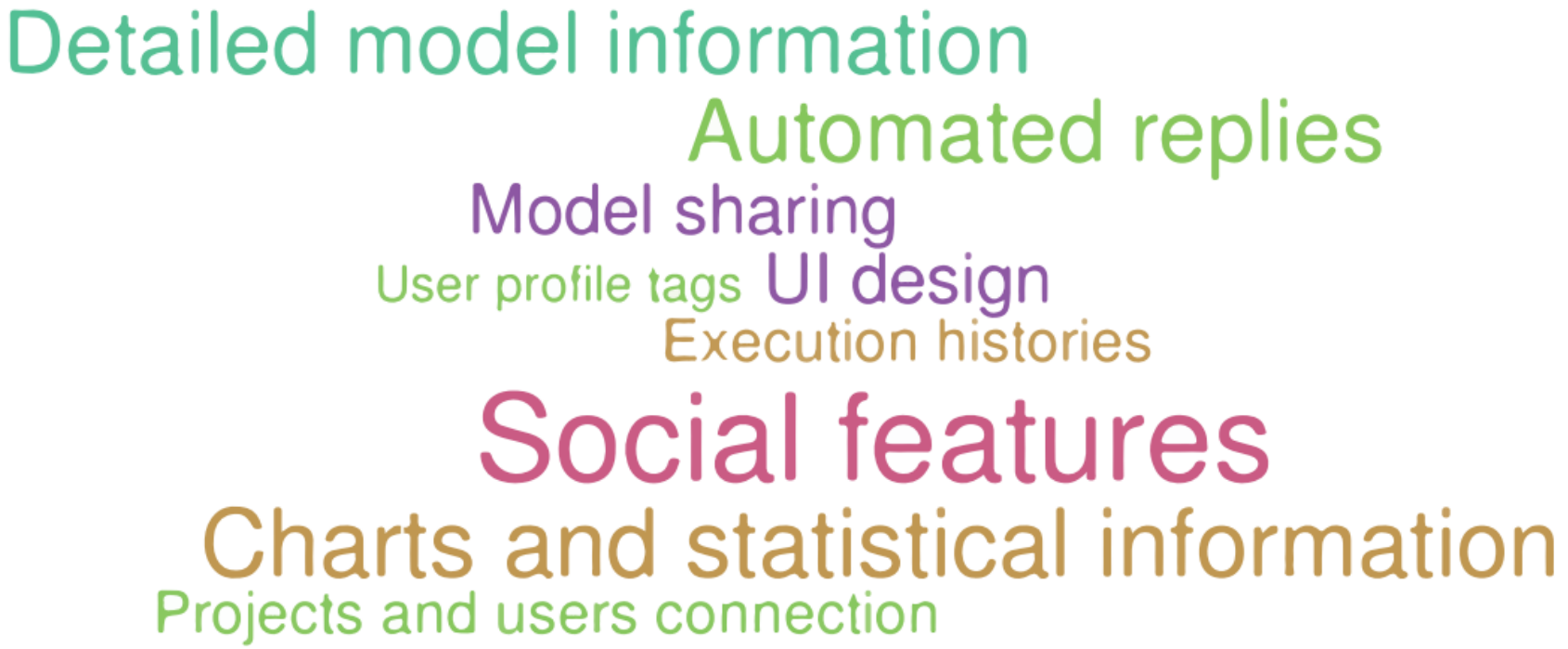
Deployment scripts and instructions

Direct model execution

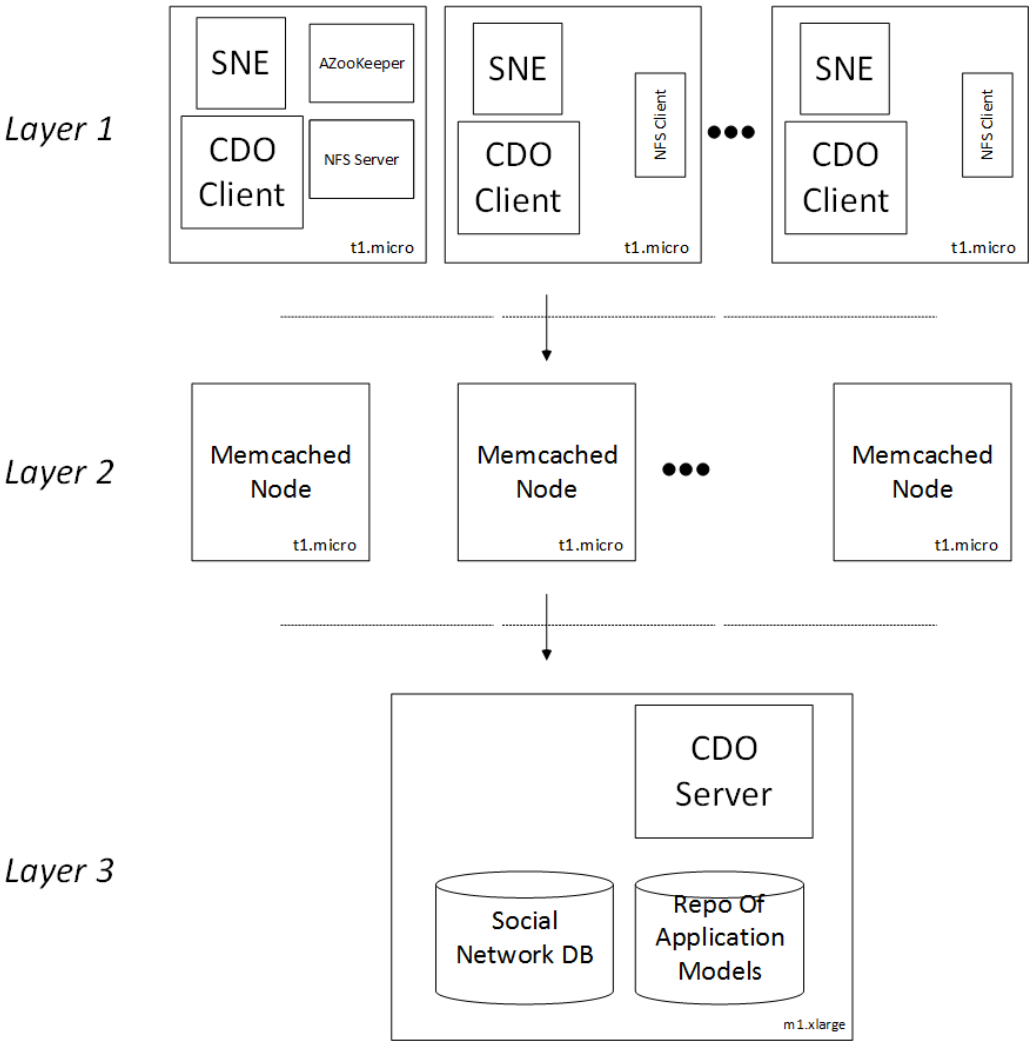
Application binaries

Software project management

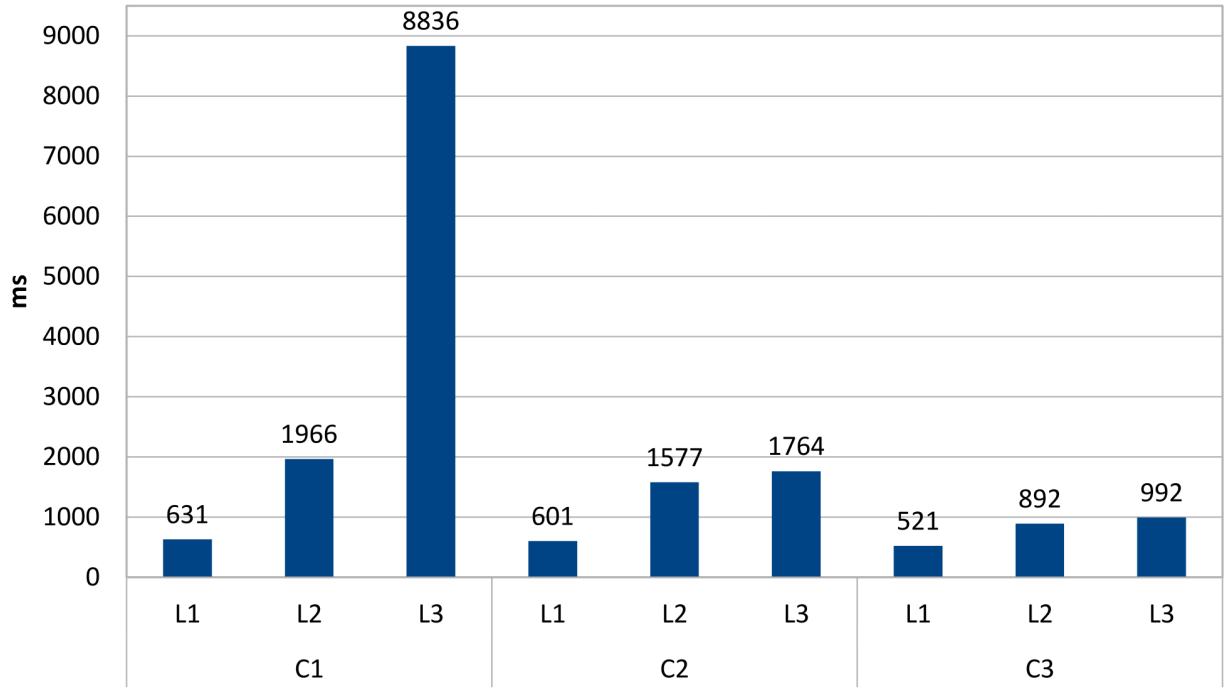
User's Feedback



Evaluated Architecture



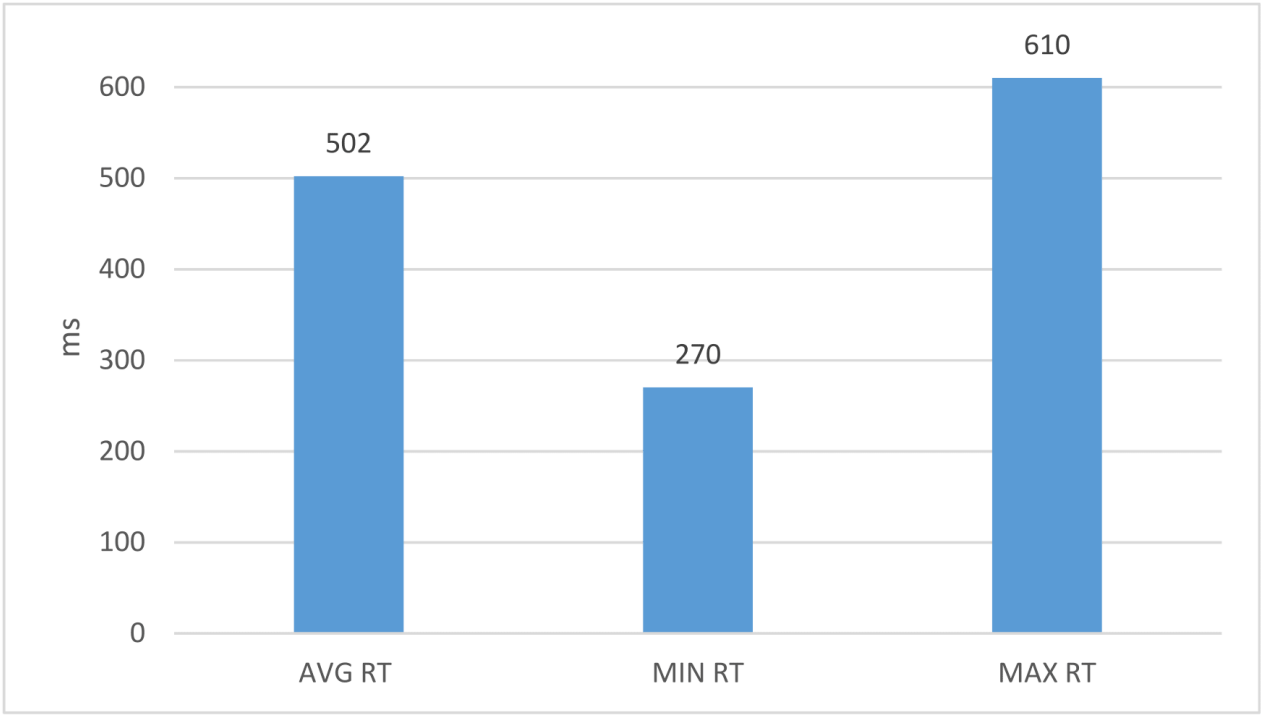
Response Time, adding Memcaches (1/2)



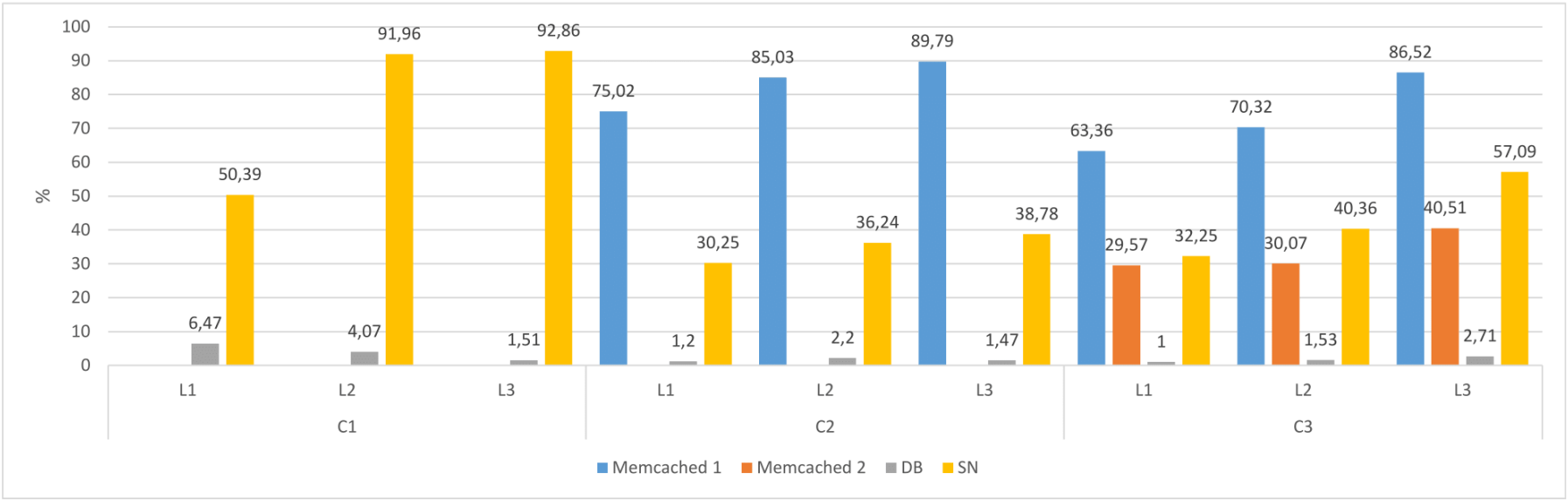
L1	10 users request 2 applications
L2	10 users request 4 applications
L3	10 users request 8 applications

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

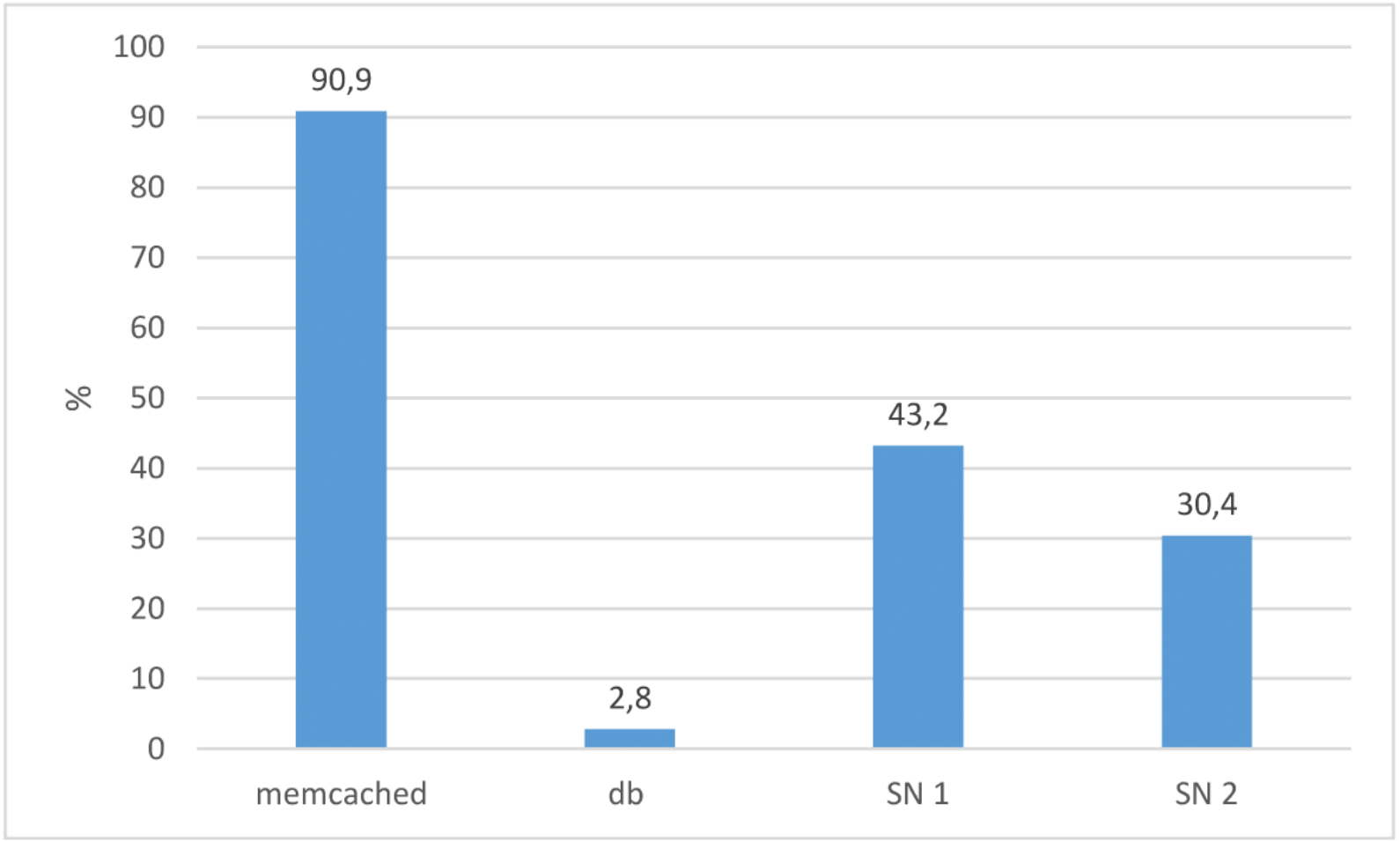
Response Time, adding SNE (2/2)



CPU Utilization, adding Memcaches (1/2)

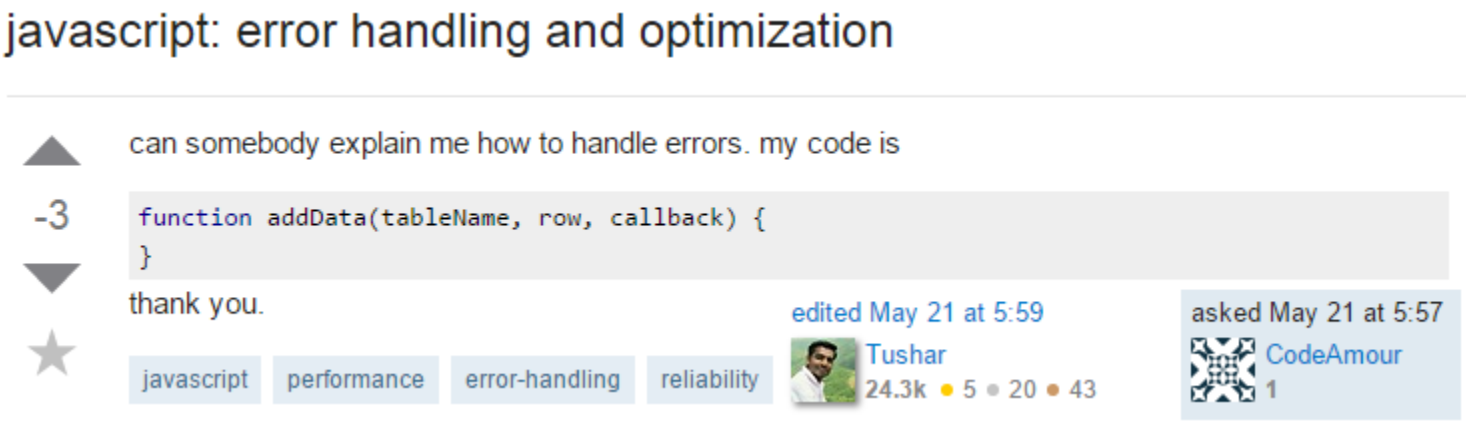


CPU Utilization, adding SNE (2/2)



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