

Innovation and Knowledge Management towards eStudent Information System - iKnow

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Software project

- To develop a solution for electronic student services and electronic enrollment

Agile development

- Usage of electronic workflow system to:
- declare and report new functionalities
- analyze their fulfillment
- keep track of activities
- actively participate in production
- communication between customers and developers

Agile development

- Tool for incremental and iterative software development
- Requirements well specified and improved during delivery
- Each requirement is specified as missing functionality in the bug reporting system
- New additions and improvements added as new bugs or comments when rejecting

Communication

- Each activity is tracked by both parties: customers and developers
- Comments are given upon each activity
- An overview of all comments for each functionality can be easily listed

State Transitions

- New – declare functionality (bug)
- Pending – developers opened it
- In progress – it is being solved
- Resolved – developers think it is solved
- Rejected – customers think needs more
- Closed – approved

Two projects

- iKnow 1 – enrollment software
- iKnow 2 – student services

Status iKnow 1 – 20 April 2012

- 384 bugs
- 17 new
- 13 pending
- 5 in progress
- 329 closed
- 20 rejected

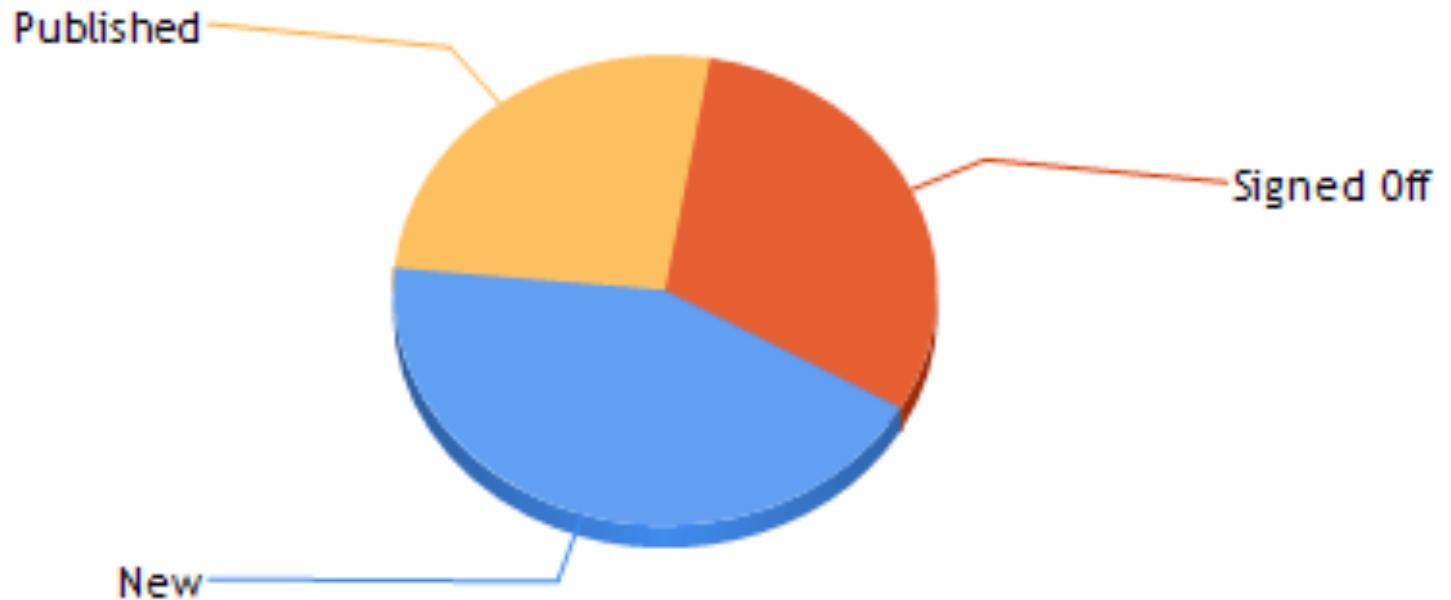
Status iKnow 2 – 20 April 2012

- 1006 reported bugs
- 9 new
- 1 pending
- 99 in progress
- 121 resolved
- 774 closed
- 2 rejected

Test cases – iKnow 1

- 88 test cases generated
- 27 signed off
- 38 approved and published
- 23 published and archived

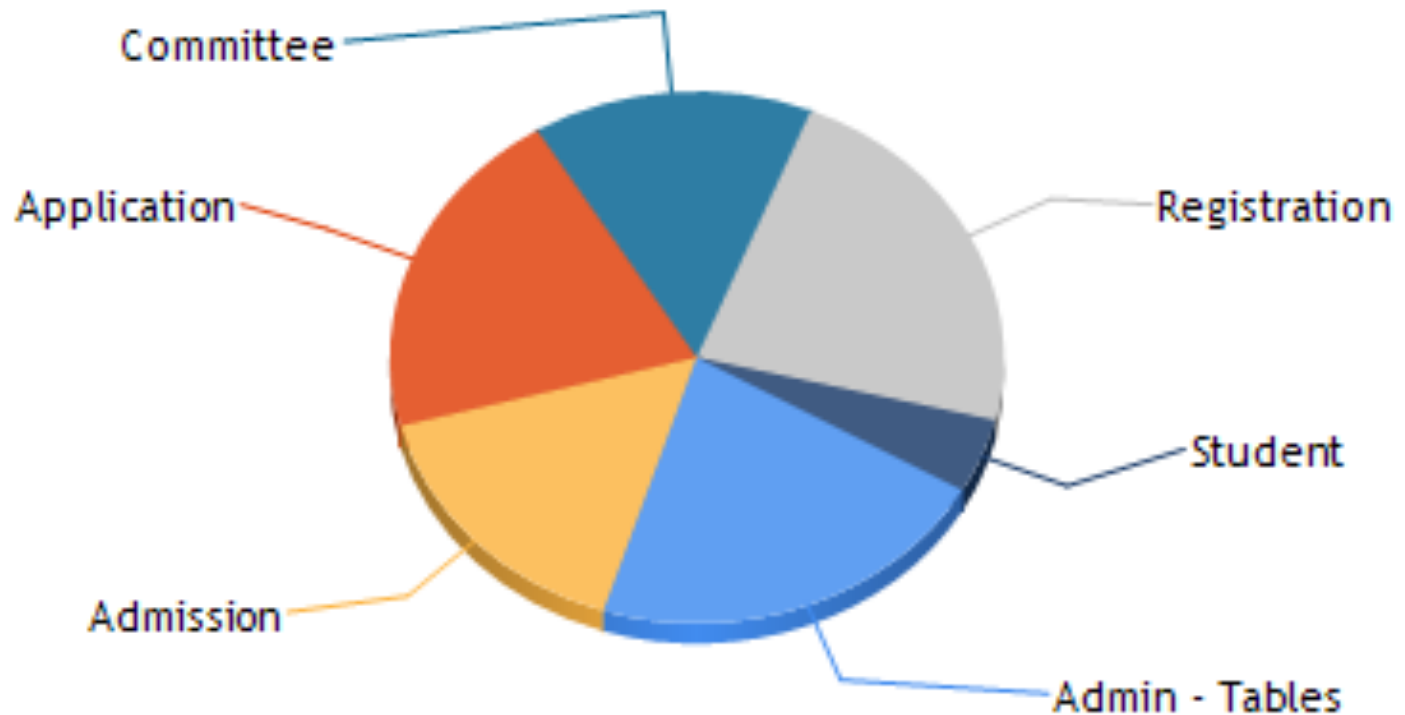
Test case – iKnow 1



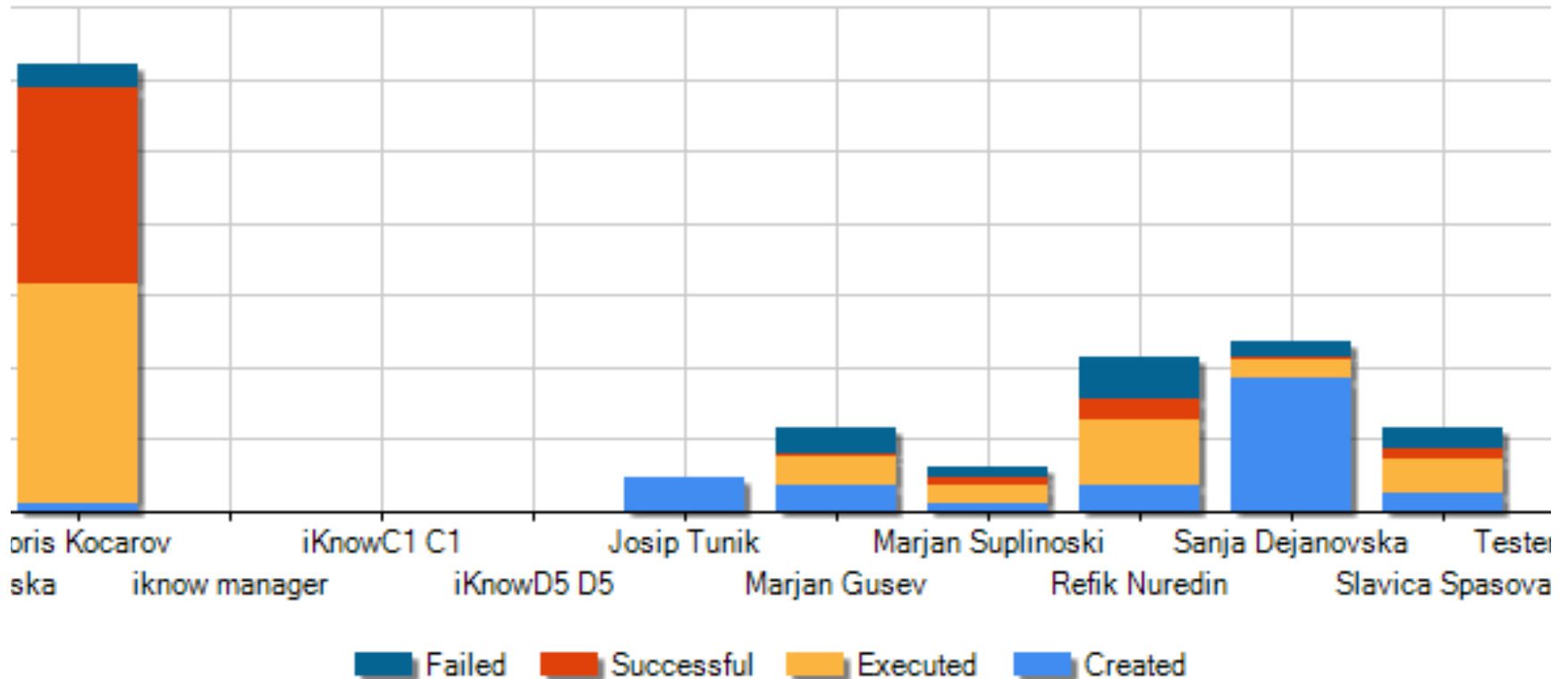
Test Cases Executions for iKnow 1

- 88 test cases
- 99 traces of executions
- 49 successful
- 50 failed

Test cases – iKnow 1 modules



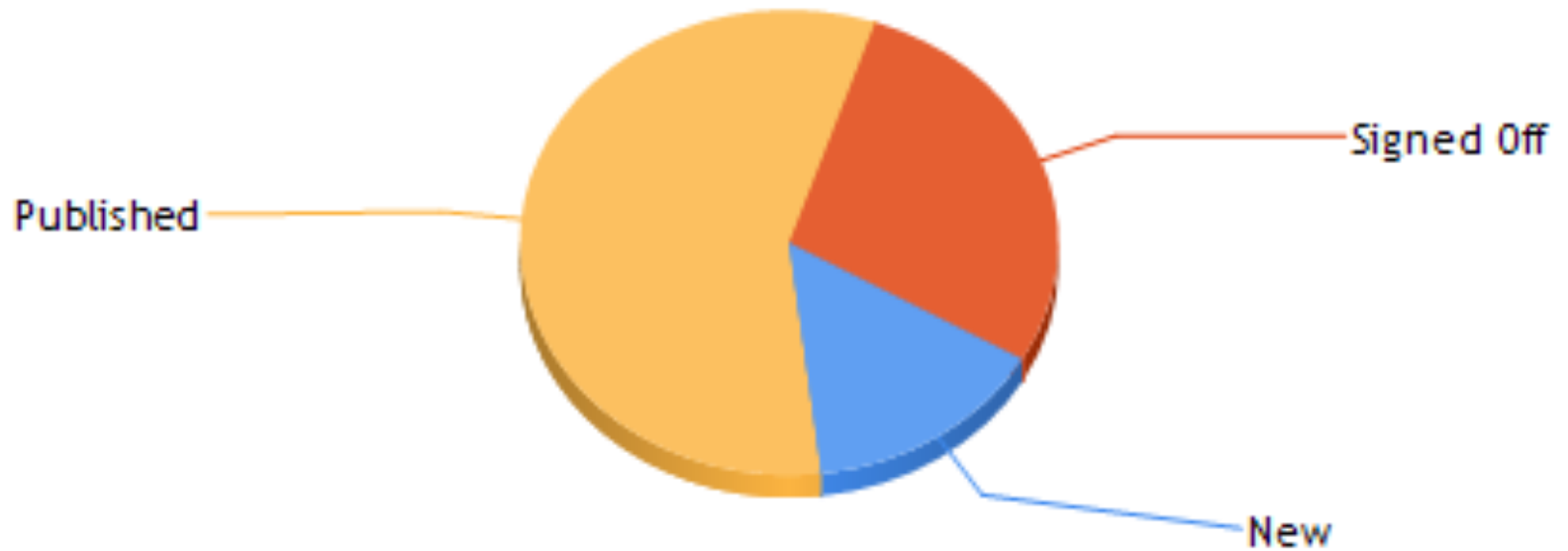
Statistics – who performed



Test cases – iKnow 2

- 373 test case
- 95 new published
- 213 published and archived
- 105 signed off

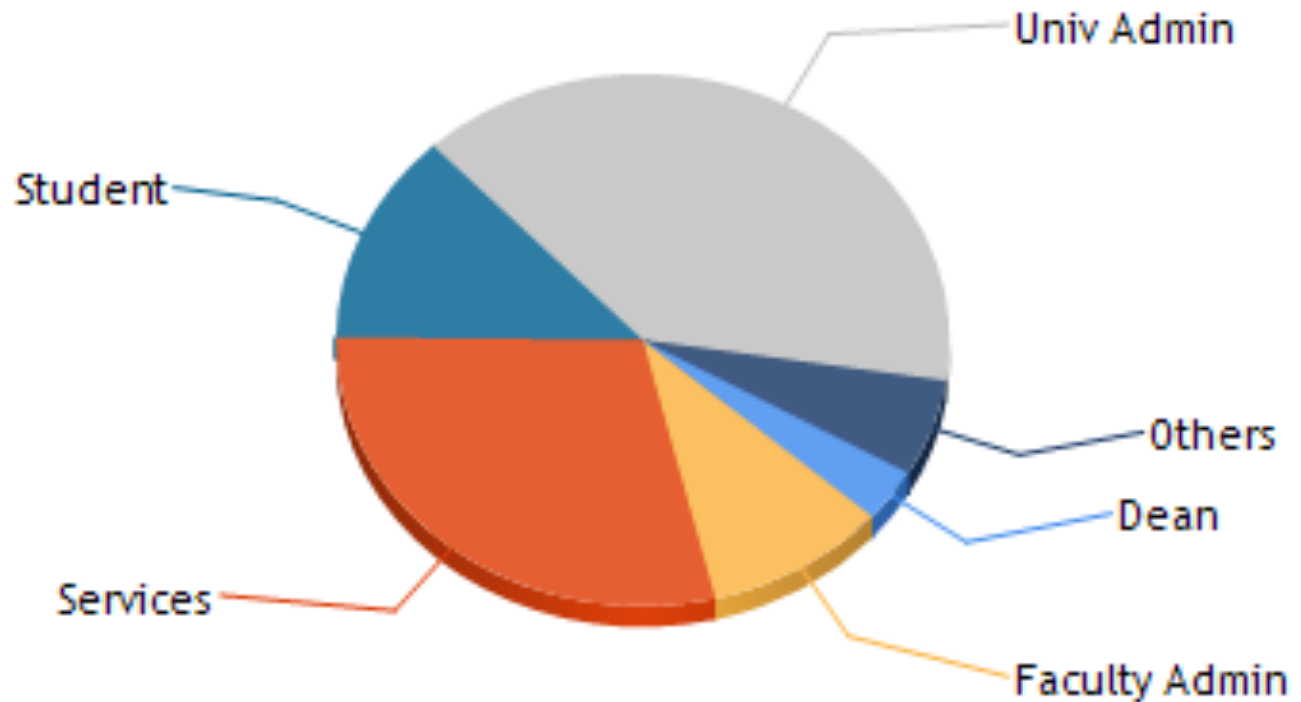
Test cases – iKnow 2



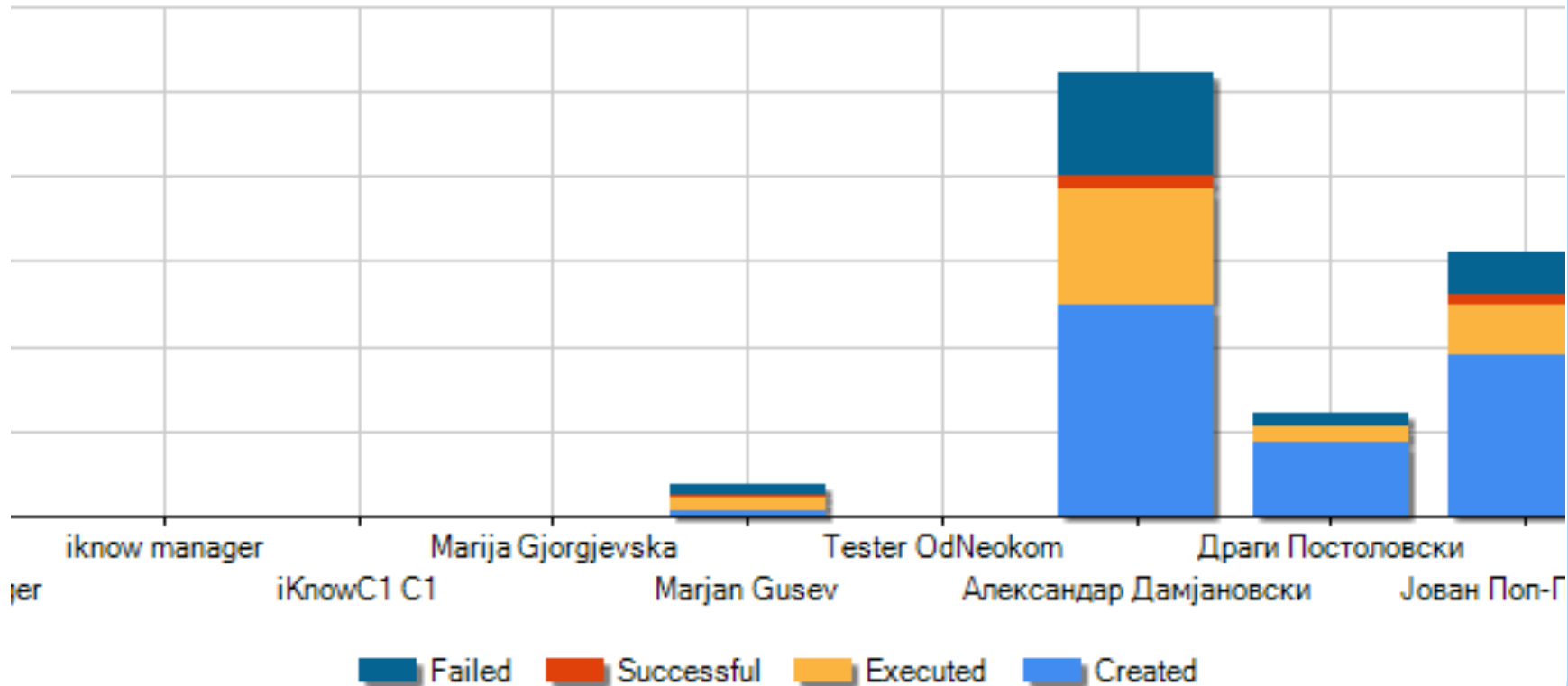
Test cases executions for iKnow 2

- 155 executions of test cases
- 15 successful
- 140 failed

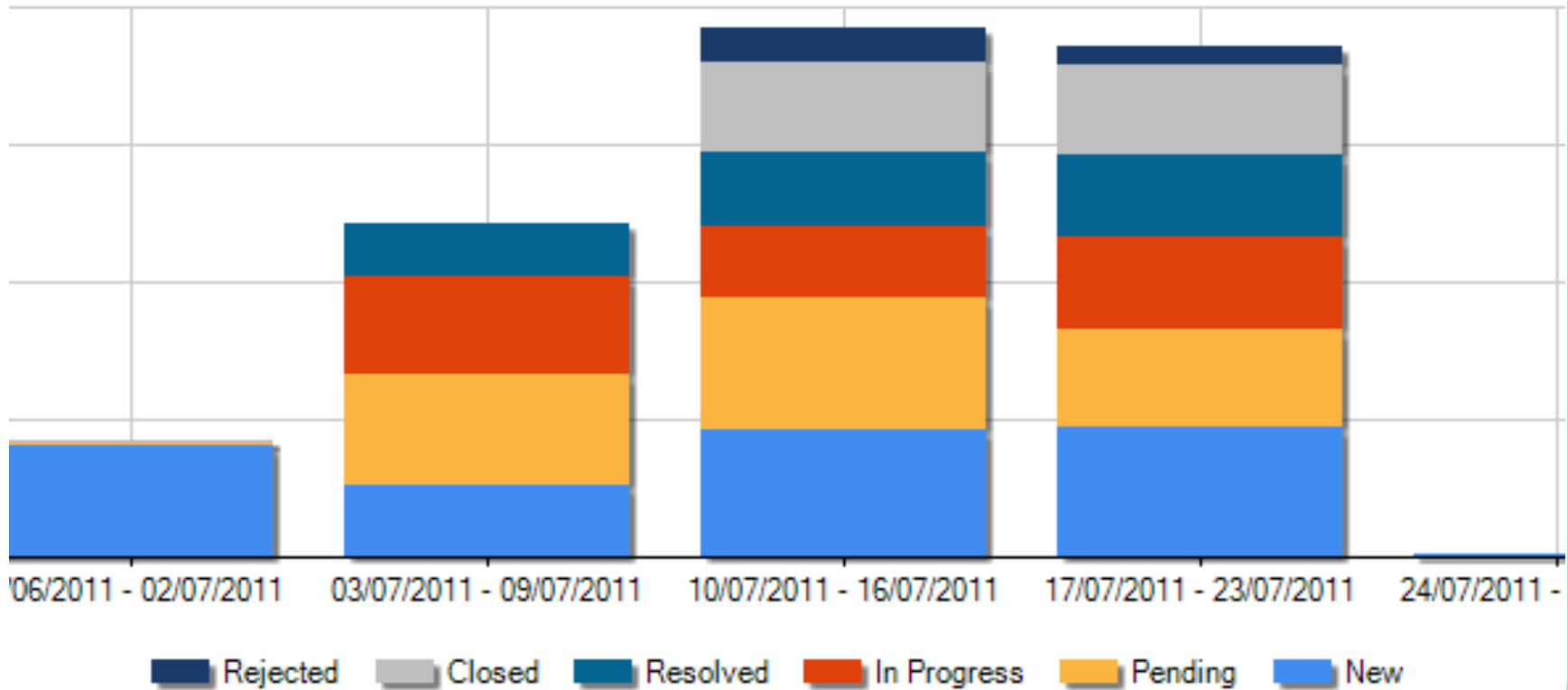
Test cases – iKnow 2 modules



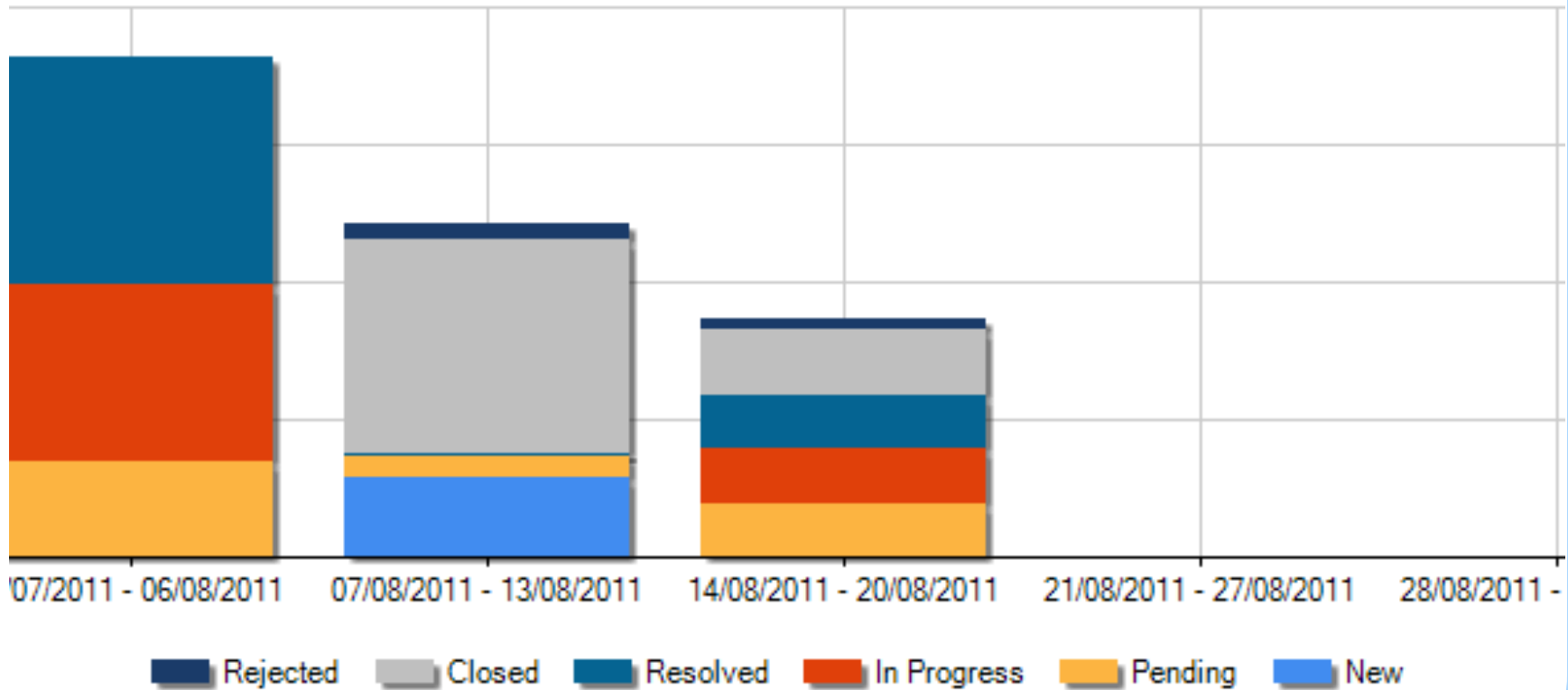
iKnow 2 – who performed



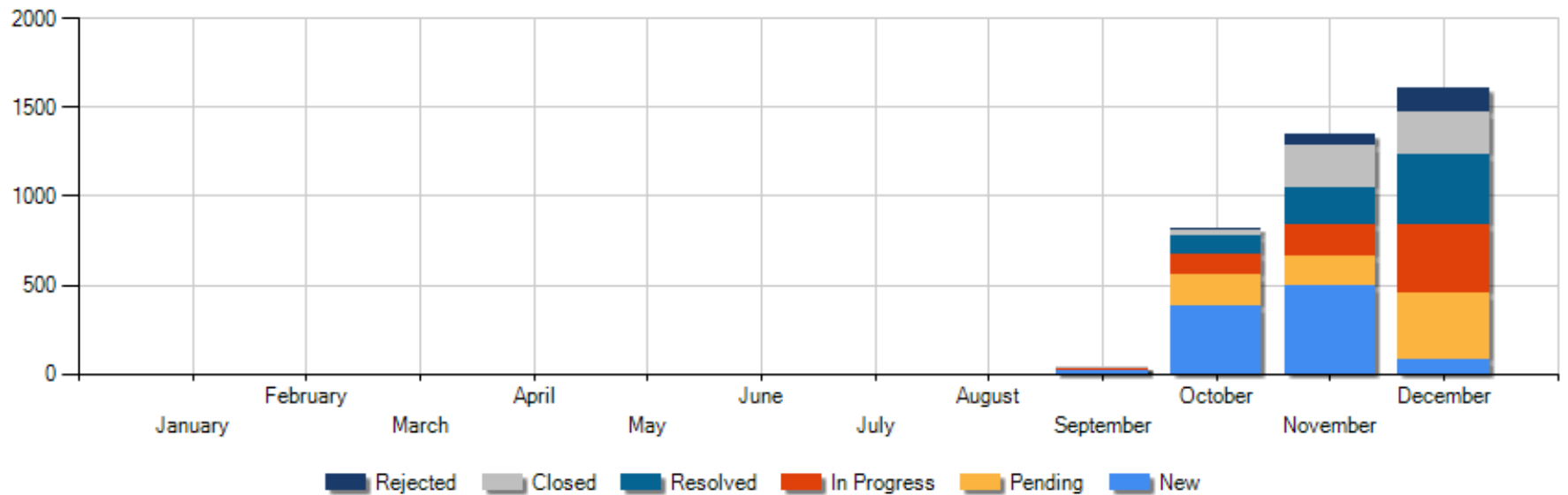
iKnow 1 – june – july 2011



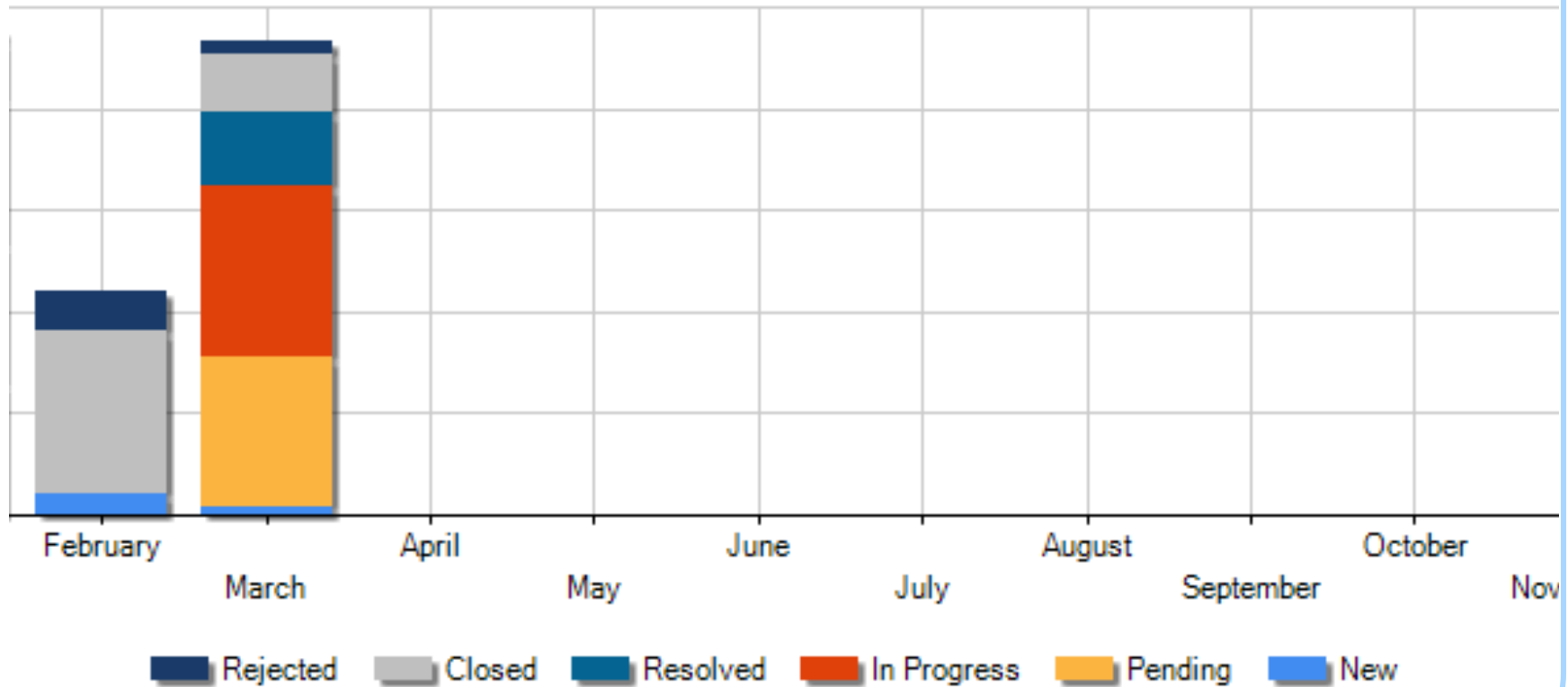
iKnow 1 – july – august 2011



iKnow 2 – timings 2011



iKnow 2 – timings 2012



Realization

- Initial functionalities specification in the bug reporting system
- First transaction of solving and approving the realized functionalities
- Production of test cases to cover check of new versions
- Checking the test case execution
- Approval if the requirements are realized