Survey on Software Release Notes

Intro

Dear participant,

Our research group is investigating the use and creation of Software Release Notes. Our aim is two-fold: (i) to assess how release notes are currently used and created, and (ii) to evaluate an automatic approach to generate release notes.

We would be grateful if you could spend a few minutes of your time to answer the following survey, which consists of three parts:

1. A questionnaire about your background.
2. A questionnaire about how you use and create software release notes
3. A short evaluation of two release notes automatically generated by our tool, ARENA (Automatic RElease Notes generAtor).

The survey will take less than 15 minutes to complete, and your participation is anonymous and voluntary. If you have any question, do not hesitate to contact Laura Moreno via email at lmorenoc@wayne.edu.

Thanks for your help.

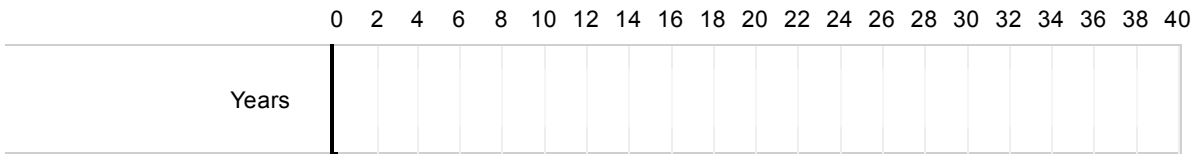
Background Information

Please, answer the following questions according to your experience with software release notes.

1. What is your current occupation? Check all that apply.

- [ ] Bachelor student
- [ ] Master student
- [ ] PhD student
- [ ] Faculty
- [ ] Open-source software developer
- [ ] Professional software developer
- [ ] Other. Which one?

2. For how many years have you developed software?



Motivation

Please, answer the following questions according to your experience with software release notes.

1. How often do you use software release notes?

- Never
- Rarely - Once every few months
- Occasionally - Once a month
- Frequently - More than once a month

For what purposes do you use release notes?

2. Have you ever created release notes for a software system?

- I have never done it
- I have done it once or twice
- I have done a few times (three to eight times)
- I have done it many times (more than eight times)

3. What kind of content do you include in release notes?

	Never	Rarely	Sometimes	Often

Fixed bugs	○	○	○	○
New features	○	○	○	○
New code components	○	○	○	○
Modified code components	○	○	○	○
Enhanced features	○	○	○	○
Refactoring operations	○	○	○	○
Changes to documentation	○	○	○	○
Upgraded library dependencies	○	○	○	○
Deprecated code components	○	○	○	○
Deleted code components	○	○	○	○
Changes to configuration files	○	○	○	○
Changes to code components visibility	○	○	○	○
Changes to test suites	○	○	○	○
Known issues in the release (i.e., acknowledged bugs that were not fixed in the release)	○	○	○	○
Replaced code components	○	○	○	○
Architectural changes	○	○	○	○
Changes to licenses	○	○	○	○
Other 1. Which one?	○	○	○	○
Other 2. Which one?	○	○	○	○
Other 3. Which one?	○	○	○	○

4. How much time does it take to create a release note?

- ○ Less than one hour
- ○ Between one and four hours
- ○ Between four and eight hours
- ○ More than eight hours

5. How difficult is it to create a release note?

- ○ Very Easy
- ○ Easy
- ○ Difficult
- ○ Very Difficult

6. Do you use any supporting tool when creating release notes?

- ○ Yes. Which one?
- ○ No

Commons Collections

Release notes for Apache Commons Collections

The next set of questions refers to the release note generated by ARENA for **Apache Commons Collections version 4.0-alpha1**, which you can find following the next link:

http://www.cs.wayne.edu/lmorenoc/research/arena/commons-collections4-4.0-alpha1.html

1. How familiar are you with Apache Commons Collections?

- ○ Not familiar at all - I don't know what it is
- ○ Slightly familiar - I know that it exists, but I have never used it
- ○ Familiar - I use it in my software projects
- ○ Very familiar - I'm a Commons Collections developer

Consider the original release note of Apache Commons Collections 4.0-alpha1 and the release note generated by ARENA for the same system.

2. The next items correspond to information and presentation issues of the original release note that are different in the generated release note. Mind that some equivalences might exist among both release notes. For example, the items under the "new classes" and "new methods" categories in the original release note might be listed under the "new code components" category in the generated release note.

How important are the following issues?

	Not at all Important	Unimportant	Important	Vey Important
"Major changes since 3.2.1" category	○	○	○	○
Different categories for "new classes" and "new methods"	○	○	○	○
"New methods in *Utils" category	○	○	○	○
Authors of changes	○	○	○	○
Other. Which one?	○	○	○	○

3. The next items correspond to information and presentation issues of the generated release note that are different in the original release note. Mind that some equivalences might exist among both release notes. For example, the items under the "new code components" category in the generated release note might be listed under the "new classes" and "new methods" categories in the original release note.

How important are the following issues?

	Not at all Important	Unimportant	Important	Very Important
"Improvements" category	○	○	○	○
"Deleted code components" category	○	○	○	○
"Deprecated code components" category	○	○	○	○
"Refactored source code files" category	○	○	○	○
Code changes for each item in "new features", "bug fixes", and "improvements"	○	○	○	○
Link to the original change request in the issue tracker for every item in "new features", "bug fixes", and "improvements"	○	○	○	○
Number of items in each category	○	○	○	○
Other. Which one?	○	○	○	○

Lucene

Release Notes for Apache Lucene v4.0.0

The next questions refer to the release note generated by ARENA for **Apache Lucene 4.0.0**, which you can find following the next link:

http://www.cs.wayne.edu/lmorenoc/research/arena/lucene-4.0.0.html

1. How familiar are you with Apache Lucene?

- ○ Not familiar at all - I don't know what it is
- ○ Slightly familiar - I know that it exists, but I have never used it
- ○ Familiar - I use it in my software projects
- ○ Very familiar - I'm a Lucene developer

Consider the original release note for Lucene 4.0.0 and compare it with the release note generated by ARENA for the same system.

2. The next items correspond to information and presentation issues of the original release note that are different in the generated release note. Mind that some equivalences might exist among both release notes. For example, the items under the "optimizations" category in the original release note might be listed under the "improvements" category in the generated release note.

How important are the following issues?

	Not at all Important	Unimportant	Important	Very Important
"Changes in backwards compatibility policy" category	○	○	○	○
"API changes" category	○	○	○	○
"Optimizations" category	○	○	○	○
"Build" category	○	○	○	○
"Documentation" category	○	○	○	○
Reporter and author of changes	○	○	○	○
Other. Which one?	○	○	○	○

3. The next items correspond to information and presentation issues of the generated release note that are different in the original release note. Mind that some equivalences might exist among both release notes. For example, the items under the "improvements" category in the generated release note might be listed under the "optimizations" category in the original release note.

How important are the following issues?

	Not at all Important	Unimportant	Important	Very Important
"Improvements" category	○	○	○	○
"Deleted code components" category	○	○	○	○
"Deprecated code components" category	○	○	○	○
"Changes to visibility of components" category	○	○	○	○
"Added code components" category	○	○	○	○
"Refactored source code files" category	○	○	○	○
"Modified code components" category	○	○	○	○
"Known Issues" category	○	○	○	○
Code changes for each item in "new features", "bug fixes", and "improvements"	○	○	○	○
Other. Which one?	○	○	○	○

Comments

Do you have any further comments on the release notes generated by ARENA?