Nucleus - Second Iteration Demo Report

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1. The date and time at which you already completed this demo, and briefly describe any challenges that arose before or during the demo.

We do the demo at Dec 4, 2018 from 14:30-15:00. In this demo, the only challenge is that for the "asking question without context" part, the accuracy is still unsatisfactory.

- 2. The specific use cases that were demonstrated, highlighting any changes since the First Iteration Demo.
 - a) Account signing up: We opened the login page and switched to sign-up page, typed in "minghao" as the user name, a new email address, and a password to register a new account. Then the sign-up page jumped to the verification page, and we received an email with the account verification code. After verifying this new account, we finished account registration and could use it to start asking questions.
 - b) Account logging in: We opened the login page, and typed in username and password to log in. Then it jumped to the main page and we could ask questions from this page.
 - c) General questions asking with relevant context. We asked "Where is New York City" and provided a related context, and Nucleus outputs the correct answer.
 - d) General questions asking without context. We asked "Where is New York City" without provide a related context. In this case, Nucleus does not offer a satisfactory answer.

Any changes since the first iteration demo:

- For c and d, we added user feedback module. In detail, after a user gets a specific answer for a question. They have the option to submit their feedback, for example, is this an expected answer or what do you think should be the right answer.
- In the question asking module, apart from the basic context-question mode, users can generally give a question without any context to get an answer. The context search function is achieved by **keyword-extraction and context-retrieve** using NLTK and wikipedia APIs.
- 3. All the user's actions, including asking questions both with or without context, will be stored in our database deployed on RDS of Amazon Web Services.

- 4. The frontend is optimized, still need to be merged to master however.
- 3. The specific CI mechanisms that were shown during the demo, including which technology you used.

We implemented the code coverage using Python package 'coverage'. The framework we used is Jenkins where we ran our test cases. We implemented the web wook with Github so that when we push new code Jenkins will automatically ran test cases with 'coverage run'. And here is our <u>coverage report</u> (Download the whole folder and open the index.html).

Other CI configurations are the same as the first iteration demo.

4. A link to the github repository where your entire codebase resides. Tag the revisions that were shown in the demo.

Our github repository is https://github.com/ysun647/Nucleus.

Also we have tag the second revision with the name of 'second iteration demo'