

# ›FIT QA System

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Client: FIT students

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## Progress Evaluation for Milestone 1

### 1. Progress of current Milestone

Task	Completion %	Jiayi	Oyinkan	Ge	To do
1. Investigate tools	100%	33%	33%	33%	
2. NLP demo	100%	0%	0%	100%	
3. ML demo	100%	100%	0%	0%	
4. Web demo	100%	0%	100%	0%	
5. Requirement Document	100%	0%	0%	100%	
6. Design Document	100%	100%	0%	0%	
7. Test Plan	100%	0%	100%	0%	

### 2. Discussion of each accomplished task for the current Milestone

**Requirements Document:** The requirements document is complete now. The hardware requirements part needs to be modified as we get to the part when we need to interact with hardwares.

**Design Document:** The design document is mainly on the overall system architecture, database design and UI design of the project. UML graphs and UI mockups are drawn to better illustrate what the project would be like when it is finished. Drawing the UML graph is the main obstacle in completing this task since Jiayi has never drawn it before and for a senior-design scale project, planning ahead on the whole design could be difficult.

**Test Plan:** Created a test plan that handles testing for the entirety of this project. It included all high level features outlined in the requirements document.

**Machine Learning Demo:** The ML demo is a python demo that takes paragraphs of GRE issue topics as input and returns the clustering results of these paragraphs. In order to do the clustering, k-means clustering from the python ML library scikit-learn is used.

**NLP Demo:** The NLP demo was a demo showing that we can use NLTK to process sentences. The next thing that we need to do with it is to apply it on the database.

**Web Demo:** This was a hello world search bar that was made using the Django Python tools. The Demo took a search query and returned a google search of it.

### 3. Discussion of contribution of each team member to the current Milestone

**Jiayi Wang:** Wrote Design Document and created a Machine Learning demo. Familiarized with UML graphs as well as mockup tools.

**Ge Gao:** Wrote Requirements Document. Got familiar with Natural Language Toolkit and created NLP demos with NLTK.

**Oyinkan Ojutiku:** Created test plan. Created Web Demo using Django Python Framework. Web Demo template was ready to implement behind the scenes programs to enable search.

#### 4. Plan for the next Milestone

Task	Jiayi	Oyinkan	Ge
1. Implement a crawler that downloads all question and answer pairs from FIT IT FAQ website.	implement	test	demo
2. Use machine learning and search to determine if a question from the user is asking about the same information as existing question.	test	demo	implement
3. Demo feature: In command-line, enter an IT related question and get an answer.	demo	implement	test

#### 5. Discussion of each planned task for the next Milestone

**Task 1:** Implement a crawler that downloads all question and answer pairs from FIT IT FAQ website.

**Task 2:** Use machine learning and search to determine if a question from the user is asking about the same information as existing question.

**Task 3:** Demo feature: In command-line, enter an IT related question and get an answer.

6. Sponsor feedback on each task for the current Milestone

- Requirements:
  - \* Review the survey to identify and add top question types
  - \* One page of class schedule: <http://web2.fit.edu/schedule-of-classes/fall/>
- Test plan:
  - \* For each question type, different ways of asking the same question
- Others:
  - \* Demo of more sophisticated nlp tools
  - \* Progress summary/evaluation

Sponsor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Sponsor Evaluation

Sponsor: detach and return this page to Dr. Chan (HC 322)

Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Jiayi Wang	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Oyinkan Ojutiku	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Ge Gao	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Sponsor Signature: \_\_\_\_\_ Date: \_\_\_\_\_