



SE3821: Software Requirements and Specification

Lab 3: Requirements Elicitation

Due: October 22, 2013 23:59 CDT

1. Objectives

- Practice interviewing techniques to determine stakeholder requirements
- Observe competitive products at work and glean requirements from their system
- Trawl for requirements using social media as a wiki

2. Introduction

The purpose of this phase of the course project is to give you some practical experience in interviewing and other requirements elicitation ("trawling") techniques.

Your (personal and team) goal in this activity is to:

- Learn from stakeholders about requirements for the class project medication monitoring system.
- Learn about the process of eliciting requirements.
- Learn from studying existing products and their capabilities

3. Elicitation process

As discussed in class, the elicitation process includes:

- Planning the overall team elicitation strategy and your personal role(s) in it
- Preparation for stakeholder interviews and any other elicitation activities
- Conducting the interviews / elicitation activities
- Presenting what you learned (about the "medication monitoring system" requirements, and about the requirements elicitation process)
- Documenting your experience

4. Specific Requirements for elicitation of requirements

4.1. Looking at a competitive product

There is an existing product out on the market today that offers some of the features desired in this product. The MedFolio Pillbox is a system which reminds users of the need to take a pill and also allows the user to program a medication schedule into the system. To begin lab, take a look at the video showing the MedFolio system at http://www.youtube.com/watch?feature=player_embedded&v=XpgoxAlfWd8. Compare this system with what you are envisioning for your system. Are there features you are considering that are different from what MedFolio provides? More details are available on the MedFolio website <http://www.medfoliopillbox.com/>, which also includes a detailed software application (<http://www.medfoliopillbox.com/wp-content/uploads/2013/07/MedFolio-Software-Presentation-3.pdf>). From looking at this product, you may have a set of questions to ask others.



4.2. Interview with elderly stakeholder

To begin with, each team is responsible for interviewing an elderly person who takes medicine on a routine basis. This can be a family member, friend, professor, or anyone else provided they meet the demographic of being older than 60. Not all team members need to participate in this review, but there should be more than one person present for the review. While the specific questions are left up to the team, it is highly advisable that you try to determine how often they take drugs and how serious the consequences of missing a dose. In doing this, however, do not be overly direct, such as asking “Which medicines do you take, how often do you take them, and why do you take them?” in a single question.

It is advisable, though not required, that you video tape the session. This way, you can use (with permission of the interviewee) their thoughts and comments in your class presentation. This also will allow you to return to the interview as a team when you are writing the requirements. The video does not need to be fancy; your computer can record over a webcam if you install Microsoft Expression Encoder.

4.3. Interview with Millennial Generation Stakeholder

As with the elderly stakeholder, you are responsible for interviewing a member of the millennial generation¹. As with the elderly stakeholder, not all team members need to be present, but it is advisable that more than one student is present. It also is advisable that you video tape the session.

With the millennial generation stakeholder, it is advisable that you find a person who is outside of the software engineering program and also has a medical condition which requires routine medicine. However, as with the elderly stakeholder, you should not specifically ask questions such as “What condition requires you to take medicine, which medicines do you take, and how often do you take them?” as a single question, as formulating the question in this manner might violate their privacy.

4.4. Interview with Nursing Students

In class, you had the opportunity to meet with nursing students. From the nursing students, you gleaned some ideas about the system you are proposing. In this assignment, you should capture what you learned from the nursing students in a manner that will allow you to use it in the next phase of the project.

4.5. Interview with a Pharmacist

One of the areas of healthcare which will be significantly impacted by this product is the pharmacist. The pharmacist is responsible for much of the handling of the prescription, from checking for drug interactions to verifying that the drug is appropriate for the condition that is being treated. Pharmacists work in both the retail and hospital settings. Pharmacists by their very nature have a tremendous responsibility placed upon them. Thus, a system such as this may have tremendous impacts on their profession. To discuss this aspects, a team of domain experts have been found, and you will each be assigned a person to interview either via skype, Google Chat, or some other system.

5. Elicitation presentation

During Monday and Tuesday of week 7, each team will have approximately 20 minutes (half of a lecture each during week 7) to present on their requirements. All team members must participate in some way.

¹ Note: This is one of the rare instances where you may use Wikipedia to research the Millennial Generation if you are unfamiliar with that term.



Oral presentations will be videotaped, and after the presentation, you will be required to watch your presentation and critique your own personal performance as well as the team's performance.

5.1. Presentation content (*within time available*) should include:

- Brief overview of your team's elicitation plan
- Highlights of your elicitation activities (e.g., interview clips) / screen captures
- Brief summary of what you learned about the medication monitoring system requirements
- Key things you learned about the requirements elicitation process

6. Elicitation report

Each team is responsible for creating a team report of their activities. Your team report should include:

1. Cover Page
2. Team roster and assigned role(s) for the elicitation activities.
3. Team elicitation plan.
4. Subreports for each elicitation activity:
 - a. Team members involved.
 - b. Stakeholders or other parties involved (name, related persona, etc.).
 - c. Preparation materials for elicitation activity (e.g., pre-plan for interview, questions, etc.).
5. Results of the elicitation activity:
 - a. What you learned about the medication monitoring system requirements.
 - b. What additional questions or issues were raised by the interview or other activities?
 - c. What you learned about the requirements elicitation process.
 - d. What you would do differently the next time you have a similar assignment.
 - e. Summary of what your team learned about medication monitoring system requirements.
 - f. Key things your team learned about the requirements elicitation process.
6. List of related materials
 - a. (e.g., video clips/files, presentation materials, documents) that you are submitting. (Don't forget to include your "Interview Agreement" forms, and to make sure it is clear which video/audio recordings correspond to which person.)
 - b. Pictures of any mind maps or quick process diagrams that you created in modeling the process

In addition, each team member is required to support an individual report. Your personal experience report should include:

1. A list of the specific contributions you made to the team elicitation effort.
2. Your personal description of, and reflections on, what you learned from the elicitation experience. You may refer both to your own personal activities and to those of other team members.
3. What you learned about the impact of engineering solutions in an economic, environmental, or societal context. For example, what did you learn from your elicitation work about how choices you make in analyzing requirements or implementing software systems might affect people in their daily lives (for good or ill)?
4. What surprised you? For example, you might have expected stakeholders to answer in a certain way or favor certain system characteristics, only to find out that they raised issues you never thought of or evaluated things in a different way.

If you have questions about the specifications for the team or individual reports, please ask.



7. Submission (Due October 22, 2013)

Create a PDF of your team elicitation report.

Create a PDF of your own personal experience report.

Additionally, if you use PowerPoint in your presentation, upload your draft slides to the instructor site.

These items must be submitted via the assignment submission page:

The team elicitation report PDF as "file 1"; one team member should submit for the team.

Your personal experience report PDF as "file 2"; one submission for each team member.

Larger files (e.g., video) should be transferred to the instructor on DVD or other acceptable medium (e.g., USB drive).

You may find it helpful to use "PDF Split and Merge" to combine multiple PDF files into one.

If you need help with the assignment submission process, please ask.