

CSC-347 Fall 2020

Dr. Andrea Tartaro

PA2: Requirements Analysis

Due: Wednesday, September 23, 3pm

Division of Labor, Schedule and Checkpoints: Friday, September 4, 11:59pm via Slack

Goal: Understand the people, technology and physical, as well as social, context that play a role in the problem area for which you are designing.

REMINDER: You may not meet face-to-face with members of your project team nor participants to work on this project! All project work must be virtual!

NOTE: You may not work with participants until your protocol(s) and consent form(s) are approved on 9/9.

Action:

1. By Friday, 9/4, 11:59pm submit a plan for how you are going to conduct your requirements analysis as a collaborative project and a schedule for completing the assignment, including a checkpoints of what you will complete by **Wednesdays, 9/9 and 9/16**. This plan should have 3 sections (label each section): Division of Labor (who will be doing what); Schedule (when will different parts of the project be complete); and Checkpoint (what specific items will I be checking on Wednesdays, 9/9 & 9/16). Include what member(s) of your team will require a Qualtrics account. Copy and paste your plan into a DM on Slack that includes all your groupmates (you can create DM to multiple recipients).
2. Conduct background research on your problem area, including literature review and competitive analysis.
3. Design a requirements analysis including three complimentary techniques: user observation, survey, and interview. Work with one participant at a time, not in groups. Complimentary methods may include all 3 data collection techniques, or might include 2 different uses of a particular technique. Use a minimum of 2 different techniques Think carefully about your goals for each technique and the order you want to conduct each technique. **No** video recording, audio recording, or photographs that can be used to identify your participants are allowed. Your protocol should include how you will record and store your data (see data collection below).
4. Create a detailed protocol and script for each method you are using. Describe the participants, materials, and everything you will say and do during the study. Include

the protocol(s) as part of your checkpoint for **Wednesday, 9/9. You should not conduct research with participants until I have approved your protocol(s) (and consent form(s), below).** You will submit your protocol(s) with your final submission.

5. Create (an) informed consent form(s) - you may want to create different forms for different techniques. How many consent forms you need depends on if you will be using the same or different participants for different aspects of your project. Consent forms should reflect the activities particular participants will complete. It is not required to get approval from Furman's Institutional Review Board (IRB) for projects conducted in class, provided the materials are only used for class presentations and reports. However, you must be ethical when conducting research with participants. This includes obtaining informed consent. **All participants must be over 18 so they can give informed consent.** Include the consent form(s) as part of your checkpoint for **Wednesday, 9/9. You should not conduct research with participants until I have approved your consent form(s).** Below is a sample consent form that you should modify for your specific project. You will be obtaining consent virtually via Qualtrics. Share all Qualtrics surveys and consent forms with andrea.tartaro@furman.edu. Note that to maintain confidentiality your consent form must be a separate survey from your data surveys. Ask a question at the beginning of your data survey to confirm the participant has completed a consent form – if the user answers no, use “skip logic” to skip to the end of the survey. Provide an ID number for your participants to enter on their surveys. It is not required that you compensate your participants, but certainly an appropriate thank you is required. Consider creative ways to thank and “compensate” your participants with no contact.
6. Conduct your requirements analysis. Completion of your data collection should be included in your Wednesday, 9/16 checkpoint. Data collection requirements: For Qualtrics surveys, select the “Anonymize Response” option in settings for your surveys, and add a password to the surveys. As described above, you may not use audio recording, video recording, or photographs that can identify your participants. Thus, for observations and interviews, you will be taking notes or collecting other text-based data. Label all data with an ID number. You should have one data sheet, stored separately from your data on a password protected computer, that links ID numbers to names. ~~You will submit this file as part of your Moodle submission. Store this file in the folder I shared with you specifically created for ID numbers on Box. Other than surveys that will be shared with me on Qualtrics, you do not need to submit records of your data, but you should save this data.~~ All surveys (including consent forms) should be shared with me on Qualtrics. **All other data (i.e., interview notes) should be saved on a password protected computer and/or Furman's Box system in the group project folder I created (separate from the ID numbers – use only participant IDs in this data).** ~~, until your final grade is recorded in the class.~~ None of your written reports should use participant ID number, names, or any other identifying information.

7. Write up your requirements analysis. You should start with an introduction that describes your problem area and goals for the requirements analysis. Provide background information on your problem area. Describe your procedures, including motivation for each method you selected. Discuss your results and interpretations of your findings. Draw conclusions about how this requirements analysis informs your design. Your paper should be an *argument* about design opportunities for your problem area with *evidence*. You should be prepared to conduct your ideation next. Use section headers, where appropriate. Please use the Chicago-style author-date format for citations. See Moodle for links about Chicago style.
8. Create a presentation on your Requirements Analysis. See guidelines in the Syllabus. Be sure to cite references (Chicago-style author-date format) and images! Images should be referenced with a caption that reads "Image source: [#]." Where the number refers to a list at the bottom of the slide or the end of the presentation. You should have a separate (Chicago-style) bibliography slide for other references in your presentation. Remember, all team members must participate during the presentation.
9. Reminder: Don't forget to maintain your project journal (see Syllabus for details).

Deliverables:

1. Division of lab and schedule due Friday, 9/4, 11:59pm via Slack.
2. Class presentation (10 min). Please be prepared for one member of the group to share their screen with Slides in Zoom. Include a .pdf or .ppt file with your Moodle submission.
3. Written report (at most 6 pages, Chicago format – note Chicago style is double-spaced. Include a .pdf or .docx file with your Moodle submission.
4. Protocol(s) for your study. Include a .pdf or .docx file with your Moodle submission.
5. Project journal entries (see syllabus for details). Include a .pdf or .docx file with your Moodle submission.

2-65 should be submitted on Moodle by the team member whose last name comes first alphabetically. You should be able to attach each as separate documents to the Moodle submission.

6. Data sheet of participant IDs and names. Include a .pdf, .xlsx, or .docx file ~~Moodle submission~~ **with your Moodle submission in the participant IDs folder on Box.**
7. Signed informed consent forms **and completed surveys** – share all surveys on Qualtrics.

8. All data collected, including notes from interviews, in the shared project folder on Box.
9. Individual reflection (see syllabus for details) submitted on Moodle in a separate submission from the project.

Sample Informed Consent Form
(Including questionnaire, interview, and observation)

Furman University
Class Project Consent Form

Project Title: Email vs. Text Message Use by Furman Students

Conducted by: (Your names)

I agree to participate in a class project conducted by students in CSC-347 Human-Computer Interaction. I understand that:

1. I will complete a questionnaire about my use of email and text messages to communicate with others.
2. I will be interviewed about my use of email and text messages to communicate with others.
3. I will be observed as I compose emails and text messages. I am aware that I may be asked questions as I compose an emails and/or text messages, so the researchers can understand how I think about the process of composing emails and text messages. I am aware the researchers will take notes, based on our conversations.
4. The data from this study may be used in class presentations and written reports for the class instructor, other students, and class visitors, this year and in future years of the class, but will not be shared with anyone else. No data from this project will be used in published research.
5. I will be compensated with a thank you email. I am aware that I will still receive compensation even if I terminate my participation in the study before it is complete.
6. The following procedure will be used to maintain confidentiality of my identity in analysis and report/presentation of any results: Data will be identified by a unique participant number and not by name. Only one electronic data sheet stored separately from my data will link my name to my participant ID. Consent forms will be submitted separately from data.
7. At any point in time I have the option to terminate my participation in the study with no consequence. I can also withdraw my data from further analysis at any time.

If I have any questions about this class project, I can ask them now or anytime throughout the study by contacting a team member: (include your contact information here) or the class professor, Dr. Andrea Tartaro, Computer Science Department, andrea.tartaro@furman.edu, 864-294-2932.

I understand that by signing this consent form, I give the students full permission to turn in the results of this research as a class project for CSC-347.

Typing my name serves as my signature:

Date: