EE476 Lab 6.5

Name:

Brain Storming, Mind Mapping Client Memo, and Tech Feasibility

NAU ID:

You have a project in hand, and have now spent some time getting to know your peers and writing up a set of by-laws. Those **by-laws are due October 26 at 11:59pm via BBLearn**. The link to submit your by-laws will open Monday.

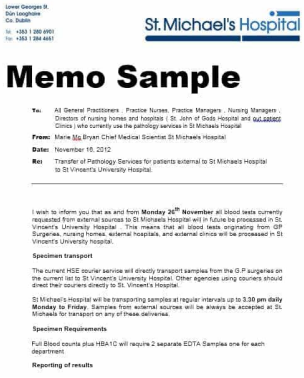
Over the next two weeks, we will focus on two core assignments, though the order is going to feel a little odd to you.

Brainstorm / Mind Map to start:
First up, and what we are focusing on today, is the Brain Storming and Mind Mapping assignment. Like you did previously in class and in lab, you will need to generate and organize some ideas around your assigned project. I want you to consider and map out aspects of:

- Some ideas of what the project is
- Some problems you might run into
- Limitations
- Some concept of solutions or approach

There will be more to this assignment, but let's come back to that…

Client Memo Assignment:
Next, with some ideas of what the project is, some problems you might run into, limitations, and some concept of solutions or approach, it's time to start communicating with your client. Your client will want to know about you, all of you in your group. They will also want to know that you have an understanding of what their problem / project is. And you probably have some questions for them! You will need to convey all of this with your first formal memo to your client. Your memo must be in a professional memo format (you've done this before in other classes, but you can get an idea of what should be included with the figure here). This will be your first time communicating with your client, so impress them! Make sure your memo is professional looking. If it looks like you did this last minute, or last second, that won't instill much confidence from them.



St. Michael's Hospital

Memo Sample

To: All General Practitioners , Practice Nurses, Practice Managers , Nursing Managers , Directors of nursing homes and hospitals (St. John of Gods Hospital and out patient Clinics) who currently use the pathology services in St Michaels Hospital

From: Marie Mc Bryan Chief Medical Scientist St Michaels Hospital

Date: November 16, 2012

Re: Transfer of Pathology Services for patients external to St Michaels Hospital to St Vincent's University Hospital.

I wish to inform you that as and from **Monday 26th November** all blood tests currently requested from external sources to St Michaels Hospital will in future be processed in St. Vincent's University Hospital . This means that all blood tests originating from GP Surgeries, nursing homes, external hospitals, and external clinics will be processed in St Vincent's University hospital.

Specimen transport

The current HSE courier service will directly transport samples from the G.P surgeries on the current list to St.Vincent's University Hospital. Other agencies using couriers should direct their couriers directly to St. Vincent's Hospital.

St Michael's Hospital will be transporting samples at regular intervals up to **3.30 pm daily Monday to Friday**. Samples from external sources will be always be accepted at St. Michaels for transport on any of these deliveries.

Specimen Requirements

Full Blood counts plus HBA1C will require 2 separate EDTA Samples one for each department.

Reporting of results

Note that the memo clearly identifies who this memo is from, who it is to, the date, the topic, has a clear text body, and even a logo and team name. You will need all of these. Format aside, here at things your first client memo must have:

- a general team introduction - you should consider saying how/why you are excited about working on this project
- a team inventory - what are each of your skills, strengths, and interests
- a description of what your team thinks this project is all about - utilize that brain storming and mind mapping you did
- at least five questions you have for your client - more is fine too

- a closing, thanking them for sponsorship of your project and providing them with contact information for you all

Submit your **client memo online via BBLearn by October 26 at 11:59pm** (yep, the same deadline as your by-laws; I have confidence you can do this). You should work on this in Google Drive/Docs, but submit a PDF on BBLearn for grading - that link will also open Monday.

Brainstorming and Mind Mapping Assignment:

Now back to the brainstorming and mind mapping assignment. This assignment has two parts. First, the flip chart idea generation and organization. Second, the formalizing of these ideas into a document that shows your thought processes and drafts a technology feasibility study.

It's easy to come up with the most imaginative and crazy designs that all work automatically and perfectly. We all know, however, that not all designs that you can imagine are feasible, meaning that they can't be implemented within limitations of cost, time, or hardware. For these reasons, it's important to (a) develop a strong early grasp of the feasibility limitation that could exist in your project; and (b) to keep these in mind continually as you do requirements acquisition and early design. Too often we've had Capstone teams that have extracted requirements and envisioned a fabulous design that has them and their sponsor completed excited … only find out later (too late!) that certain key elements of their design simply aren't feasible. Developing an early understanding of what can and can't be done is a key to producing a good and successful design!

The objective of this assignment is simply to structure your exploration of these feasibility questions, and to answer them - for your education as well as to convince your sponsor of your competence - in as complete a fashion as possible at this early project stage. As you gain experience in a particular area, you will be more and more able to automatically stay within the bounds of feasibility in your design based on that previous experience. Even so, it is the rare project where you don't have anything at all that is new or challenging to tackle/learn. Doing a feasibility analysis is a great way to make sure you have your bases covered and can launch into solution design within realistic framework for envisioning your final product.[1]

The first thing we need to consider is the scope of the project. What existing technologies will you utilize, and what will you need to create from scratch? What alternatives are there for any of these? Why do you, as a team, think you should used a particular solution for each part of the project? You'll need to do this for every aspect of the project. True, you haven't agreed on project requirements yet, but you will soon. This assignment will be due after that (more on that in a minute).

Next, how will these parts all fit together? Do you have additional technologies to consider there? What are the big challenges that you foresee? How will prove the feasibility of any given part of this approach?

Finally, close your formalized document with some reassurance to the client that you are capable of completing the project at hand.

Let's unpack this a little more, and clarify exactly what I want you to include in this assignment.

- This document should also be in PDF memo format, as this will be delivered to your client (and submitted via BBlearn for grading).
- Digitize, in a professional manner, your brainstorming (consider a word cloud?) and mind mapping exercises. I expect both will evolve over the course of completing this assignment, and even more so as you continue to communicate with your client.
- Make sure you introduce your brainstorming and mind mapping figures/tables, don't just drop a figure into your document with no reference to what it is.

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[1] Some of this is borrowed from the CS Capstone sequence

- Define the scope of your project. This will be agreed on with your client, but here it is a draft from your discussions you should be having with your client soon. (A quick note here, you should ask to meet with your client weekly, providing them a status update on what you are working on, an idea of direction, and getting feedback from them along the way).
- You should then cover what technologies you plan to use for each part of the project. Tell the client about why you are thinking you will use this specific technology, how it compares to others, and what others are available to you should this not work out.
- You will need to discuss challenges for any of these technologies (as part of those tech sections) and potential challenges you see for the entire project (as it's own section in the document). How do you plan to address those challenges?
- Finally, the closing.

This is the pre-prototype draft of a technology feasibility document. You will revise this for sure, but this should start the road map to your project completion. This will also prove to help identify exactly what requirements your client has, also in draft format. I would expect that this document is between 7 and 8 pages long. If you're coming up short, you are probably missing something - just your brainstorming and mind mapping aspects will probably take three pages alone; the introduction and memo header is probably another one page.

This assignment will be **due November 9 at 11:59pm via BBLearn**. Be sure to send a PDF to your client by this time as well.

By November 2, you will need to solidify your project requirements. Work with your clients to best understand what their requirements are - you will be presenting on this to class at the end of November. And yes, they may well evolve over time, but we want something that everyone agrees on soon - you don't want major changes to these requirements after November.

What's coming up:

By Monday, you will also be assigned a formal GTA mentor. Reach out to them and coordinate a time that you can meet with them weekly. They will be reporting back to me on how you are all doing.

Next week, October 26, you will hear from Bob Witwer again. He will speak on the "Voice of the customer." On November 2, we will cover how to break a problem into parts and prototyping. At this time, you will begin prototyping parts of your project. We will also cover how to place orders for your project. You will have until the end of the month to prepare and present three prototypes of your project. These prototypes will be demonstrated to your GTA, and ideally your client. During the last week of November, your team will present on your project, the concept, requirements, prototype breakdown, and prototype success. More details on that in the next few weeks - for now focus on your Client Memo Assignment and Brainstorming/Mind Mapping Tech Feasibility Assignment.

Remember, a final copy of the cultural paper assignment will be due October 19 by midnight (11:59). Staple your peer review (that your partner provide to you) behind your draft paper to submit in class on October 19. You do not need to submit your final copy at this time, but I do need your paper draft and review.