

Guidelines for EECE417 project – first phase (Due Date: Feb 2, 2011)

Please follow the instructions provided in this document when preparing your requirement analysis document for the course project. Failure to follow instructions can earn you a 0 for the document.

- 1- The requirement analysis document should be at most 2 pages, in 10 point Times new roman format. Please use single-spaced text and 1 inch margins (at the minimum).
- 2- Please consider going through this page and watching the video:
http://www.bchydro.com/energy_in_bc/projects/smart_metering_infrastructure_program.html
It is not technical, but gives you a lot of useful information that helps you have a clear understanding of the system you are developing.
- 3- This is the smart meter being installed by BC Hydro:
<https://www.itron.com/na/productsAndServices/Pages/OpenWay%20CENTRON.aspx?market=electricity>
You can find some useful information in this link. But try not to get lost in the low-level details that do not concern you in this project. Instead, try to get the high level idea.
- 4- To come up with the requirements, you should think of both functional and non-functional requirements of the system you are developing. For example you should think about constraints like memory limitations as well as security issues, and also what the meter should do.
- 5- It is fine to make assumptions about the system but they should be reasonable. Try to provide justifications for your assumptions.
- 6- You can use the format of your choice for presenting the requirements of the system, but it is a good idea to use some of the standard tools. For example “use case diagram” is a famous way of modeling the functionalities of a system. You can find necessary information on use case diagrams on the web. One example is: <http://www.andrew.cmu.edu/course/90-754/umlucdfaq.html>. Please note that this is an example and you do not have to necessarily use “use case diagrams”. You are welcome to use other ways of representing the use cases.
- 7- It is important that the requirements that you come up with are clear and as precise as possible. Remember that these requirements will be mapped to functionalities in your design document. So doing a good job at this stage makes the design easier for you.
- 8- You need to ensure that the requirements you create are implementable in the project. Creating unreasonable requirements and failing to address them at later stages is a bad sign.
- 9- Your work will be graded based on three things. First: how well you have covered all the necessary functionalities of a smart meter. This does not mean that you have to come up with all possible functionalities. But we want to make sure that you are considering the most important functionalities that the meter should provide (and they are not many!). Coming up with functionalities that do not make sense could have negative effect. Second: How clear and precise is each requirement. This means that whoever is reading the document should understand the purpose of the requirements. The requirements should not be too high-level and abstract - they have to be solid and clear. Third, how well written is your report, and how well you have presented the information in the report.
- 10- **You will need to hand in a hard copy of the requirements document (one per team) in class.**