

CSC440/540 Homework 2 (Human factors)

- Name: Mike Huber
- Deadline: October 23, 2017 (Monday)
- Submitted: October 23, 2017 (Monday)
- Time analysis (Format [hh:mm])

	Q1	Q2	Q3	Q4	Q5	Total
Estimation	02:30	06:00	01:10	00:30	01:20	11:30
Measurement	01:35	05:21	00:54	00:32	01:07	09:39

Q1. Start setup & writing your software engineering book: 10pt

[N/A 2017/09/12]

	LinkedIn	GitHub	BitBucket	Total
Estimation	00:30	00:30	01:30	02:30
Measurement	00:16	00:22	00:57	01:35

1. LinkedIn

- Finished

2. GitHub

- Created and sent download link
- <https://github.com/Mike-Huber/CSC440-Software-Engineering/blob/master/HW2/Hello.md>

3. BitBucket

- Created and started on the book then sent download link
- <https://bitbucket.org/huberm6/se-book>

Q2. Read/watch/think/write about human brain: 12pt

[N/A 2017/09/12]

	Wolpert	Lobdell	Memory	Anki	PPT	Total
Estimation	01:00	01:30	01:30	01:00	00:30	06:00
Measurement	00:53	01:38	01:47	00:54	00:09	05:21

1. Daniel Wolpert: The real reason for brains

- Very apparently, the focus of this talk is that brains are used solely for *movement*. The speaker goes into a good example of a sea creature

called a sea squirt. This wonderfully named creature finds a place to settle, then consumes its own brain because it no longer needs it. Another part of this talk is about finesse and dexterity. Humans have an incredible amount of dexterity even with the “noise”, as it’s termed, going on with the commands our brain sends to our body. There is a robot that took weeks to create to simply pour a glass of water from a water bottle. Such an easy task for humans. Lastly, the ability to predict the feeling and force of a motion based on whether it is internal or external comes from the brain. This of course still ties in with the concept of the brain being solely for movement. It is interesting though that our brain also is able to take past experience and the prediction that it can make and essentially average them to find a fairly accurate representation of a force - or an example this speaker gave, where a tennis ball will land. I believe that a lot of this makes sense, and can definitely agree with the speaker that our brains’ sole purpose is for movement. He mentioned the fact that we forget most of our early childhood because it doesn’t pertain to movement but I disagree in a sense. I think that we may forget that part of our childhood possibly because it was the *wrong* way to move. Think of it this way, we as adults don’t crawl on our hands and knees in order to get from one place to another.

2. Marty Lobdell - Study Less Study Smart

- To start, I just want to mention that I really enjoyed this professor and his talk. He seems intelligent in a wide variety of subjects and was great at explaining things in a way that is easy to understand. Now on to the actual presentation he gave. There are 7 “tips” that Marty talks about to help students study more effectively. They are the following:
 - Study in chunks. To start, most people can study to full potential for about 25 to 30 minutes. After this bit of time, take a break. It only has to be about 5 minutes of a break, so you can go listen to a song or some other form of reward for your chunk of study time. Marty gives a great example of how studying for too long can have a negative effect on grades, one person he knew actually failed a semester even though they studied for 6 hours a night!
 - Have a study area. A lot of people, including myself, study in their bedroom or dormroom. The downside of this is that the primary function of a bedroom is to sleep of course. So since you are in the room you normally sleep in, you’ll want to sleep instead of study and not get much done. Marty also gave other examples like studying in the kitchen, where you’ll want to make a sandwich. Not very productive there either. The good news is, there is a simple solution to having to study in rooms like those. There was a study done at a Hawaiian university where they made a specific lamp their “study lamp”. They allowed themselves to only turn that lamp on for studying and nothing else. These

people received a grade point higher than the comparison group, who did not use this strategy.

- Recollect, don't recognize. When you use a highlighter, but end up highlighting the entire page, you aren't doing yourself any good obviously. However, the same actually goes for if you highlight just the most important things. The reason for this is because you will skim through the book later, looking for those important marks to study and when you find them you'll say to yourself, "I remember that!" but you won't really remember it. You only remembered that marking. From there, you'll end up not even studying that part of the book because you thought you remembered it.
- Taking notes in class. Most university students probably think they do this, but it's incomplete. I am a culprit of this as well. Marty mentions that in order to get the full potential of taking notes from a lecture is to go back as soon as possible and expand on those notes. This should preferably be done right after the lecture so as to not forget any of the information. When we go back and recollect the lecture and expand on our notes, we increase our understanding of what was discussed. The other positive takeaway from this strategy is that if you can't expand on those notes, you now know that you didn't fully understand that section and can find the professor or a classmate to ask clarifying questions until you do understand it.
- Teach what you learn. This is something that has definitely helped me learn personally. After learning about something or sitting through a lecture, find someone to teach about it. My close friend is always interested in different things so I go to him when I'm stuck learning something and I attempt to teach him. If you can teach a subject, you know that you understand it and will possibly even gain a deeper understanding. Similar to expanding on your notes, if you can't explain the information to someone, then you probably don't fully understand and should go back and revisit that area. Marty also mentions in this part that if you don't have someone to teach, that's alright. Just dialogue with an empty chair. Even just saying the information in your own words means that you understand well enough to teach it.
- Use textbooks effectively. It was a little harder for me to grasp this part than the others since I have never heard of the SQ3R technique. SQ3R stands for survey, question, read, recite, review. With textbooks, you should take a look at both the beginning and end, unlike a novel. Then you can see things that interest you and make you ask questions. These may be about pictures that you're seeing through the chapter or definitions and words you don't yet know. Now that you have questions, you have a target to read towards. After reading the chapter now, you

want to recite your knowledge. This might be where you can write out some summary similar to expanding on class notes, or teach someone the chapter. After this step, you have a pretty deep understanding of the chapter. Once test day comes up, you should be able to just go back and review the information to make sure you haven't forgotten anything. This technique was fantastic for me to learn because I feel like I've never used a textbook the right way, I've always tried reading chapters from beginning to end which gets really boring and I start just reading the words on the page instead of the actual content.

- Mnemonics. Using things like acronyms, phrases, or interacting images is one of the best ways to learn in my opinion. One of the examples Marty uses in this video is ROYGBIV. An acronym for the colors of a rainbow. This is something we usually learn at a young age, and for me, ROYGBIV was exactly how I was taught. Even to this day, this is something I've remembered. Phrases and interacting images normally don't work nearly as well for me, but one of the examples given in the video is the months with 31 days versus 30 days. A lot of people these days learn to count on their knuckles, and each raised part of the knuckle is a long month (31 days) and each valley of the knuckle is a short month (30 days). This is an interacting image. Regardless of what types of mnemonics work best for you, all it takes is finding what works and sticking to it.

[13:06 2017/10/22]

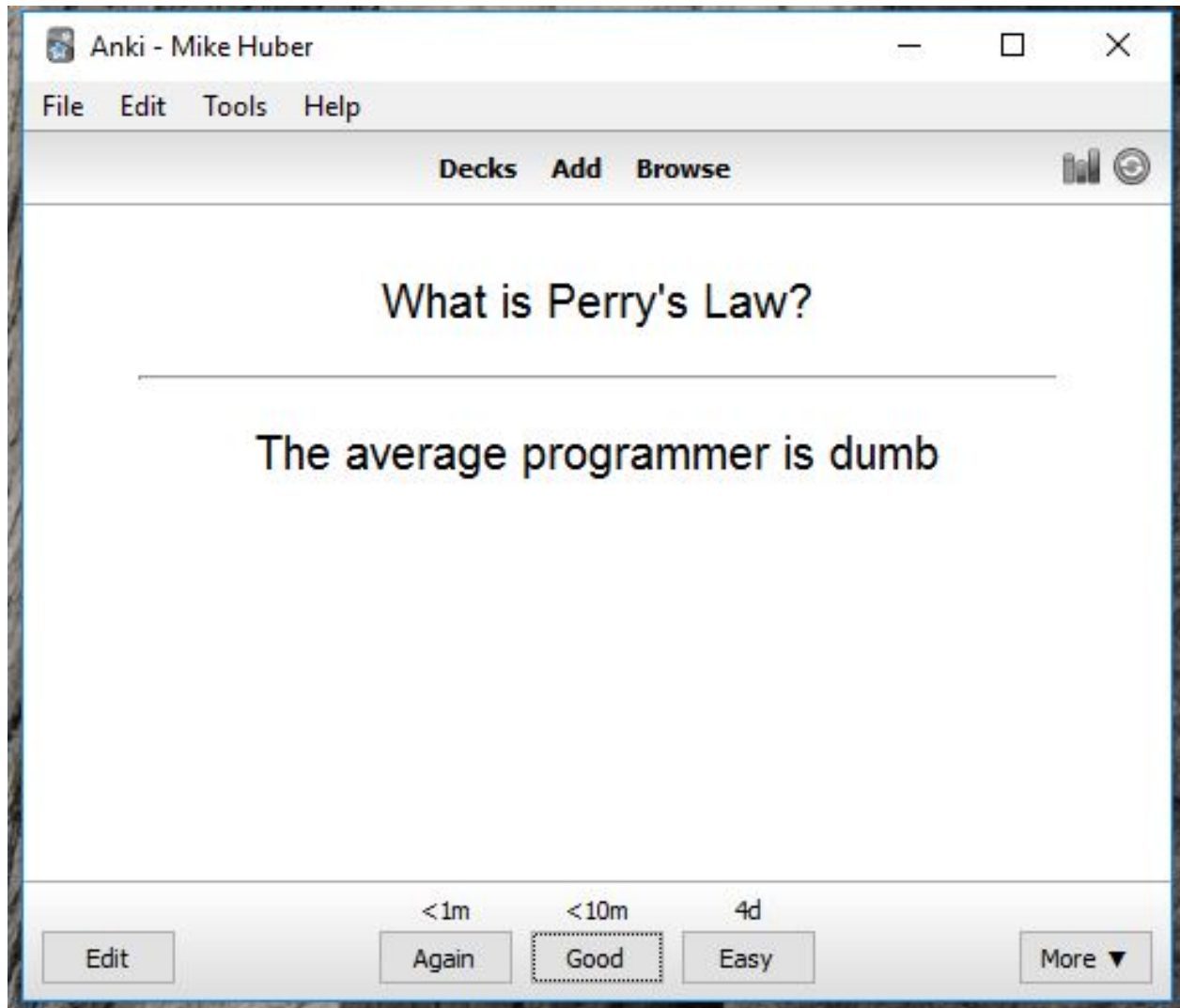
3. **Canvas/Files/HW2/Readings/memory_master.pdf**

- This paper is about memorization, the psychology behind it, and software that can aid people with it. Piotr Wozniak has invented a piece of software called SuperMemo that takes information from studies about the timeline of memory and forgetting to use in helping people incrementally learn. This provides people with the ability to more deeply understand and remember the material they desire to learn. Mainly, spacing out learning over an exponential amount of time is the best way to go about incrementally learning. A few other side things about memorization and learning are that physical health is important and quick solutions like chewing gum or using supplements don't affect memory in the way they are advertised. I can't really say whether I agree with this method being precise or not because I am guilty of procrastinating just like other stereotypical students. I will say I'm interested in trying incremental learning with something like a new spoken language in the future, and obtain a more reasoned opinion then.

[14:53 2017/10/22]

4. Anki Software

[15:47 2017/10/22]



5. PPT and other sources on learning

- We learn best when we have to work in order to achieve the goal we are striving for. Similar to the idea of throwing a child in water to learn how to swim, if we have to adapt and survive to learn something, that will be engraved in our memory for a long time. From my experience, I learn best after I have finished working out or running. Whenever I throw myself into a subject without knowing anything about it, I tend to deeply understand that subject after figuring it out on my own. I can test out incrementally learning by using Anki to start studying the concepts of this course to see if I perform better on the final exam than the midterm. Exams are an effective way of judging how well I understand content because I can see how difficult or easy it is to form my understanding of the information into valid answers for the exam questions.

[15:56 2017/10/22]

Q3. Read/watch/think/write about human factors (individual): 10pt

	Q1	Q2	Q3	Q4	Q5	Total
Estimation	N/A	00:10	00:30	00:15	00:15	01:10
Measurement	N/A	00:04	00:28	00:07	00:15	00:54

1. Canvas/Files/HW2/Readings/knowledge_worker.zip

- Bonus

[16:03 2017/10/22]

2. Role Model

- Who is your role model?
 - My role model is my father.
- What makes him/her the role model?
 - He is my role model because of his work ethic and his willingness to do anything for the people he cares about. Even after he has worked all day, he still takes care of my grandpa and helps take care of my niece. He is definitely the most selfless person I know.
- What would you do to be like him/her?
 - I would be attempting to improve my ability to understand and empathize with others so that I can do whatever is needed of me. My social anxiety tends to get in the way of that, but I try to overcome that in order to make others happy.

[16:07 2017/10/22]

3. Read Earl Nightingales's "The Strangest Secret"

- What do you think makes the difference between one person great when others don't?
 - I think the difference is a person's realization of the quality of their work. There are some who output low quality work but don't know it or don't care, and there are even some who output high quality work and don't know it or don't accept it. Feedback is a great way to manage this.
- Argue that Earl's secret can be one of the reasons or not
 - Earl's secret is definitely one of the reasons. He notes that people with goals and intent will strive towards that intent. Once that direction and purpose is there, the success will follow. Part of this direction should always include being the best you can be in my opinion. There is no reason anyone should have trouble accomplishing at least that task.

[16:35 2017/10/22]

4. Remembrance

- What do you want to be remembered when you die?
 - I want to be remembered as a good person who works hard towards his goal and strives to be the best I can be at all times.
- What would you do to that?
 - I would clearly define what my goals are and make sure that others around me know what those goals entail. My way of being the best I can is based on always surrounding myself around incredible people. Then, since I naturally have a competitive mind, I aim to be as good as those people. Some times it doesn't work out perfectly because those people are of course masters in what they know. However, it gives me a reason to have the desire to learn their mastery and allow them to take me under their wing. This allows me to be a more well-rounded person, which is my loose definition of success.

[16:42 2017/10/22]

5. Goals

- What is your life goal?
 - Learn as much as possible. In order to achieve this goal, I will seek out something new to learn as often as I can, then focus on that single thing for a couple weeks to a month at a time. I also previously touched on the fact that I surround myself with incredible people. Of course I will learn from them anything they are willing to teach me. I've found that I take what I learn from a master/my teacher and then expand on that so I know what my teacher knows plus what I know, thus surpassing the teacher in most cases.
- 40 years?
 - I plan to be retired. Living in a modest house in a way that

anyone would want to call home. I want to be caring and generous to others and be able to share my experiences and knowledge with everyone who is willing to listen.

- 10 years?
 - Within 10 years I hope to have a mastery in something specific that I can be proud of. My current avenue towards that mastery is through computer security. Since I enjoy it so much and always have the hunger to learn more about it, I feel as though this will be what I'll be most refined in. From this time until I'm able to start teaching those around me, I plan to keep learning on a broad spectrum so that I have some experience with everything that sounds interesting to me at whatever moment I plan to pursue it.
- 5 years?
 - In 5 years I plan to be on an uphill climb towards my mastery in the art of technology. This is where I keep constantly throwing myself into areas of technology that I'm not familiar with so that I can learn to adapt and become familiar with that area.
- 1 year?
 - A year from now, I plan to have started on my path towards my career. Also I plan to have my own place to live of course and start forming my own habits and traditions. I feel like learning from those around us is a good start, but we should always branch out and take pieces of each influence in our lives to create our own unique life. If I can accomplish the start of this uniqueness, I will feel successful.

[16:57 2017/10/22]

Q4. Read/watch/think/write about human factors (team): 8pt

[16:58 2017/10/22]

	Q1	Q2	Q3	Total
Estimation	N/A	00:15	00:15	00:30
Measurement	N/A	00:18	00:14	00:32

1. **Analyze company from GG's perspective**
 - Bonus
2. **Discussion 1**
 - Will there be a punishment if deadline is not met? Is it okay if this deadline is not met?
 - First, it depends on whether or not the team member notified the team leader (me in the case). I feel like if they let me know

ahead of time that they are running into some complications and it might lead to the deadline not being met, it might help their case. At least I then know what the situation is and I'm not being told at the time of the deadline that it was "because of tech issues". If the latter happens, it seems more like an excuse that the member came up with in order to hide their inability to do the work or their laziness. So yes, if there is a predetermined punishment for not meeting a deadline, that punishment should be exercised. I believe this should be the case because that is why that punishment is predetermined. If it is ignored for one person but then in the future someone else was punished, it would seem very unfair. As blunt and straight-forward as my answer is to that part, it may be obvious that my answer to whether or not it is okay that the deadline is not met is no, it is not okay. That doesn't mean that the issues of missing that deadline can't be mitigated in terms of the whole of the project though. If communication is established about the tech issues early on, then the overall team's work can still be saved by others potentially volunteering to help or some other solution the team can agree upon.

- Like/Dislike from other answers
 - I like Ethan Gallagher's point that team members should be responsible for giving themselves a bit of extra time to compensate for things like IT issues. Cyprian Nwachukwu's answer is a little too vague in my opinion in terms of the question that was asked. I do agree with Cyprian that communication is vital, but they never directly answered if a punishment would be dealt or if it was okay or not that a deadline is not met. On the other hand, I disagree with Katelin Bolen's answer because she mentioned that issues should be dealt with on a case-to-case basis. As I mentioned in my own answer to the above question, I feel like this may have an outcome of members thinking the leader is being unfair.

[17:16 2017/10/22]

3. **Becoming owner/C-Level Executive

- What will be your rules in managing the company? List and explain why
 - No surprises. As long as leadership is aware of the complications that members are running into, we can work to find a solution together.
 - Communication needs to be open. I have found from experience that talking about what is bad and what is good leads to productivity. For this reason, there will not only be leadership meetings like most companies, but there will also be team member meetings and mixed meetings with representatives from each section of the

company. This way, everyone's voice will be heard and they will have different contexts to speak in.

- Feedback will go both ways. Normally in a company, team members will be evaluated for their performance. This will also be true for all managers all the way up the chain to C-level executives. There will be opportunities to provide feedback for everyone so that we all have the means to improve.

[17:30 2017/10/22]

Q5. Read/watch/think/write about human factors (country): 10pt

	Q1	Q2	Q3	Q4	Total
Estimation	00:20	00:30	00:30	N/A	01:20
Measurement	00:08	00:23	00:36	N/A	01:07

[18:32 2017/10/22]

1. Best country

- To you, what country is the best and why?
 - The best country to me is America because it's where I live and the only country I've ever been in. It's hard to judge other countries if I haven't experienced them at all.
- How can you be sure your perception is real or image
 - Have we been brainwashed to think this way? I think it's possible that we may have been. However, I know people who have come to America from other countries and they have told me that from their experience, America is better in most ways. America also has the most immigrants compared to other countries. If it weren't a good place to be, what might be the reason for people to want to come to the country then?
- How did you get the perception that the country is the best?
 - The only way I received this perception is actually through those who I've known to come from different countries and have told me that this is the best one they've lived in.

[18:40 2017/10/22][20:30 2017/10/22]

2. Mongolia

- Summarize why Mongolia became the most power country in the 13th century
 - The first thing that comes to my mind is Genghis Khan. Since he was such a good leader and was kind to those on his side, this brings about followers. On top of that, the Mongolian people

were some of the best engineers and learners of the world. Not to mention the military power that they attained. I think these three things combined all led to the country becoming great.

- Analyze how GG perspectives can be applied in Mongolia's success
 - GG perspectives can be applied to Mongolia's success by looking at the leader for example. Genghis Khan falls in the category of a level 5 leader. Another part of GG that can be tied into Mongolia's success is the idea of getting the right people "on the bus" first and then deciding where it'll go. Mongolia's citizens and military were definitely a part of the countries driving force.

[20:53 2017/10/22]

3. The Effective Executive Summary

- Do you see the connection between EE & GG? Why or why not?
 - This summary was very hard to read for me personally. I did not like the writing style of this author and most of the paper felt sarcastic with a hint of complaint behind it. This could be inaccurate since I have not read Effective Executive yet, but I have read a good deal of Good to Great by Peter Drucker, and the things that the author of this summary complains about don't seem to be present at all. Anyway, from the little amount of useful information I gathered from this summary, there is a good connection between at least two parts of Good to Great and Effective Executive. First and most obvious, there's a clear connection with the idea of having a good leader. In Good to Great, one part of a great company is a great leader and Effective Executive has the formula to making that leader a reality it seems. The other connection I made between the two books is the importance that an executive has in picking the employees of the company. This ties in nicely with the idea of "first who, then what" from Good to Great.

[21:29 2017/10/22]

4. Canvas/Files/HW2/Readings/Cole_Robert_The_Japanese_Software_Industry.pdf
 - Bonus