A. Interview 1

1) **What is your position in this firm?**
   - Project Manager.

2) **For how long have you been working here?**
   - Two and a half years.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
   - Six years. Started working as a developer for a year and then moved on to project management. A mixture of many areas but the main trend is project management.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
   - I am a user of the competence sheet, I fill it out.

5) **What is your general impression of measuring competence in software engineering?**
   - I think it is necessary because it allows developers to identify their weaknesses in different programming areas and show their strengths. It also allows you to know what level you are such as senior or junior and it shows what competence you need to reach the next level. Companies have different ways for measuring competency in my experience.

6) **How do you feel about the way competency is measured in this company?**
   - I haven't had my competence measured in other companies. This is the first time I experience this.

7) **Do you think it accurately reflects your competence?**
   - I think the 1-5 scale is a good way of showing your competence. It could be described more clearly though.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?**
      - No, the sheet doesn't help identify your ability to solve abstract problems.

8) **What do you think of the current way of keeping track of and updating the competence sheet?**
   - I don't really like it because you need to keep exchange e-mails and there are a lot of them to keep track of. I'm not a fan of it in general.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
   I think that would be the best way to handle it.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
   - To be able to compare you progress and see how you have improved over time. Also the ability to contact the administrators in regards to the subjects of the sheet. If the current data is wrong or outdated the admins should be made aware.

B. Interview 2

1) **What is your position in this firm?**
   - Manager

2) **For how long have you been working here?**
   - Since 2005, but I also worked here 1999 to 2002

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
   - Since 1994. I started as a developer and worked as a developer until 2010 and then went to project management

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
   - I made it. I use it to assign people roles and do an inventory of all of the employees and their competence. It has not been used much since we are not many people so you are familiar with the developers and their skill level. We are expanding so we need to document competence better.

5) **What is your general impression of measuring competence in software engineering?**
   - I have not done it outside of sigma, but it is important to measure competence. It is especially important for people with a similar position as me since it allows us to find out which developer is right for which position.

6) **How do you feel about the way competency is measured in this company?**
   - We have developed it last year and we used it ones and it worked that time, but we realized that we needed traceability.

7) **Does the competency sheet perform as expected in practice?**
   - I think that it accurately reflects their competence if you know the person. Because you want to know how confident you are. If you have high self-esteem you tend to grade yourself higher and if you have a lower self-esteem you grade yourself lower. So it is important to be familiar with the person that you view their report. It would be difficult for a third party to use it. It will be better over time when people start getting used to it.

8) **What do you think of the current way of keeping track of and updating the competence sheet?**
   - It's not good. Me and the other manager have our versions stored and there is no synchronization between our versions.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
   - I think that's what we need to do for many reasons. The storing, we don't have to care about a lot of excel files. We can add versioning, it could be done in excel but it's easier and more accessible in the web.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
   - For consultants it's better for them to update their subjects and track their progress over time. Fro managers it is important for them to view the strong and weak areas of the organization and also use individual data to view the skills that the project manager need for staffing.

C. Interview 3

1) **What is your position in this firm?**
   - Software Architect.

2) **For how long have you been working here?**
   - 1 and a half year.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
   - 13 years give or take. Pretty extensive experience.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
   - I was part of deciding what should be in the actual sheet. Creating of the profiles(frontend/bakend) etc. Also fills in the sheet. Does not look at the results however can see the results if he wants.

5) **What is your general impression of measuring competence in software engineering?**
   - The reason why people do it is because it is useful to start projects and find available resources and skillsets. What do I know and what do I want to know more about. Have dealt with it in some form at other companies as well. Some kind of sheet or matrix is the most common solution I think.

6) **How do you feel about the way competency is measured in this company?**
   - Don't really like it at all at the moment. It feels tacky to send around excel files.

7) **Do you think it accurately reflects your competence?**
   - Its very hard to measure. So it's hard to know if it actually measure your competence. Depends on many factors. Less experienced thinks they're more experienced and vice versa.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?** - No.

8) **Does the competency sheet perform as expected in practice?**
   - I don't really know because I didn't have any expectations. Have been used a bit but we haven't talked to much. Managers mostly use it.

9) **What do you think of the current way of keeping track of and updating the competence sheet?**
   - We haven't really been able to update it. I can see a lot of problems with updating it in its current form. I don't even know where my current file is. I have no idea who's keeping track of it. If I wanna fill it in again I need a new file etc.

10) **What are your thoughts about turning the competence sheet into a web-based system?**
    - It feels way better because you don't have to do the manual steps anymore. You can do it whenever you want to without fixed times. If i complete a project I can update it depending on the stuff i learned.

11) **Are there any special features that you would like to have if the web-platform is to be implemented?**
    - Not really any special features. Learning more about the subjects. More explanations of them. If you don't know the acronym you cant really answer the question.

D. Interview 4

1) **What is your position in this firm?**
   - Developer

2) **For how long have you been working here?**
   - Since October 2013.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
   - This is my first job within the field.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
   - I just fill it out for my quarterly meeting with my manager.

5) **What is your general impression of measuring competence in software engineering?**
   - Not really. The only thing I have done before is fill out a stack overflow form, a yearly online survey and read some reports. Does not really have any impression about it.

6) **How do you feel about the way competency is measured in this company?**
   - The competence matrix is very new. We haven't done much measuring yet and maybe it could've been more focused on the techniques and frameworks for more specific positions. I'm working with back-end so I dont really need to answer the front-end questions.

7) **Do you think it accurately reflects your competence?**
   - Yes I think it does.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?**
   - Yes.

8) **What do you think of the current way of keeping track of and updating the competence sheet?**
   - I would prefer not doing it in excel and see my progress in a clearer way. I think it was hard to see where I improved in the current solution. It would be nice to how I compare to my department.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
   - That would be great. So I can log in and maybe when i have reached a level for a competence and update it when I want to instead of quarterly.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
    - I would like to see how i compare to others, not specific persons but in general. Trending competencies. A separation of back-end/front-end/database. Show where we're strong and where we're weak. The views should not be different for managers and developers(Data transparency).

E. Interview 5

1) **What is your position in this firm?**

- project manager and project maintenance.

2) **For how long have you been working here?**
- 3 and half years

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
- 7 years. I have been at the same project from the start in sigma.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)** - I fill it in when my supervisor asks me to.

5) **What is your general impression of measuring competence in software engineering?**
- It is easier in software engineering than project management. It was easier for me to judge my competence as a manager than now as a project manager.

6) **How do you feel about the way competency is measured in this company?** - It's pointed towards developers. It's not valued for project manager. It doesn't say much about him as a project manager and is not that impactful.

7) **Do you think it accurately reflects your competence?**
- The idea is not that bad, since it's more or less programming languages, database, and so. This is not relevant to me since I do not program at all. If I was a developer I think it works well for developers.

8) **What do you think of the current way of keeping track of and updating the competence sheet?** - It's not easy to keep track of it, it's not hard but since it's not frequently updated he needs to search for the file whenever he needs to update it. If you can find a way to make it more useful to use it weekly that might be better. I need to search for it through past emails which is a bit annoying and slow.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
- Good a lot better that it is becoming a web platform.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
- The sheet should be more specific to your role, otherwise I think it works fine. It's hard to evaluate your own competence since it's hard to measure soft skills. If I am a developer now and I would like to become a project manager it might be better to be able to view them and see how I can become one.

F. Interview 6

1) **What is your position in this firm?**
- I am technical project manager.

2) **For how long have you been working here?**
- Almost 4 years.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
- 18 years, good.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)** - I use it, but I think it's aimed towards developers and not me.

5) **What is your general impression of measuring competence in software engineering?**
- People lie in their CV. In Sweden people usually know more than what's on their CV. But it's the other way around. I don't think it's good to use something that people fill in themselves. I have not dealt with competence measuring before.

6) **How do you feel about the way competency is measured in this company?**
- It's good for the individual user since it gives you goals to go for. So I think it's a good idea. In a big company like sigma it could be a good first selection tool to find people, but not for me in my current role.

7) **Do you think it accurately reflects your competence?**
- I think it's accurate but we should have 1 to 4 instead.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?** Yes

8) **What do you think of the current way of keeping track of and updating the competence sheet?**
- I don't know where my sheet is right now, but then again it's not for me.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
- - I think it's a good idea to turn it into a web platform.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
- No special ideas, since I have not used the excel sheet a lot.

G. Interview 7

1) **What is your position in this firm?**
- Manager

2) **For how long have you been working here?**
- Five years.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
- For twenty one years.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
- I don't fill it in. It's made for the developers. It's there to show what competences are needed and there are around 100 right now. It's not only used by us managers but by many other different roles as well. It can be applied to a lot of fields other than development as well.

5) **What is your general impression of measuring competence in software engineering?**
- I don't think its about measuring the competence. It's more to show what we know right know and what we want to know. It's not measurement that decides your salary or prestige in the company. It's all about inspiration to improve and evolve. Seeing goals that you can achieve by learning is a really good thing in my opinion.

6) **How do you feel about the way competency is measured in this company?**
   - People seem to like it a lot. Everyone think its a clear way to show what we need to focus on. I have only received positive feedback so far. No one sees it as a negative thing being measured by having any pressure put on them, only gains. Because it is very new the updating part is the only negative aspect.

7) **Do you think it accurately reflects your competence?**
   - Yes I think so. Reality is very close to what people have written. If someone got low competence in something we take that into consideration when assigning tasks. People have been honest putting honest answers. And we have been clear about that it is to show how you can improve, it does not increase your status or salary. That in my opinion encourages honesty.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?**
      - Yes I think so.

8) **(If creator) Does the competency sheet perform as expected in practice?**
   - Yes, the results are very close to what is presented in the sheet.

9) **(The assigner of tasks) Has the assignment of the tasks been successful?**
   - Yes I think so.

10) **What do you think of the current way of keeping track of and updating the competence sheet?**
    - It is a bit complicated at the moment. We made it and sent it to everyone and then got a filled in version back. It's very manual and time consuming for us managers. Comparing them is even harder.

11) **What are your thoughts about turning the competence sheet into a web-based system?**
    - Very good. Going to simplify filling it in and evaluating the results. Will give us a good overview of our current competence.

12) **Are there any special features that you would like to have if the web-platform is to be implemented?**
    - A comparison of the results. Showing how you have improved over time. To be able to fill it in whenever you want. Making it into a mobile application or responsive web application. Making it simple to fill in and evaluate. Some explanation of what the subjects mean. Sometimes people write they have a bad score in a subject because they don't know what the name means.

H. Interview 8

1) **What is your position in this firm?**
   - Developer

2) **For how long have you been working here?**
   - Five years.

3) **How long have you been working in the field? How would you summarize your experience? In terms of working experience.**
   - Five years as well. I've worked with mobile apps and sales before. Brainstorming and workshops. There weren't many mobile developers back then. I was involved in most of the processes when it started.

4) **What is your involvement with the competency sheet? (did you use it? Did you help create it?)**
   - I have never used it to assign people. It's more about showing the competence and match it to requests. I just full it in.

5) **What is your general impression of measuring competence in software engineering?**
   - Obviously you need to measure it in some kind of way to see who got the right competence. But I guess the best way to measure competence is yearly experience. However that can only be used in your main area of expertise. But putting a level system is better than selecting "Senior" or "Junior".

6) **How do you feel about the way competency is measured in this company?**
   - I think it's better to have a 1-5 scale than a junior/senior scale. It's hard to say if you're 1-5 unless the scale is defined properly with information. I think the system at this moment with the excel file is not a good thing and hoping new better things are to come.

7) **Do you think it accurately reflects your competence?**
   - Yeah I think it does. However, I do think in my position within mobile applications we have architects and managers that decide the competence you need to reach senior/junior. Their decisions are not always up to date and unused languages and frameworks might still be there. A filter should be a way to have an influence over the competence.

   a) **Does the competence sheet effectively measure your ability to solve abstract problems?**
      - Yes.

8) **What do you think of the current way of keeping track of and updating the competence sheet?**
   - Not very well. It works but only once a year before you talk to the manager and get asked to do it. Most of the people do it in time but a lot of them also might be late and forget to do it. It should be able to be updated whenever you want to. As soon as you learn something it should be updated.

9) **What are your thoughts about turning the competence sheet into a web-based system?**
   - I think it's great. I know the mobile application feature is a bonus but I think it would be great if you can do it on your phone.

10) **Are there any special features that you would like to have if the web-platform is to be implemented?**
    - Phone or tablet functionality. Competence to be added through suggestion form. All the features the current excel macro has should be there.

APPENDIX F
USER STUDY PROTOCOL