- Paper compilation and to – do list.

- Fix Chapter 2: State of the Art.

- There was a plan to switch Chapter 2 and Chapter 3.

  - These are the State of the Art and the User Group.

- **The goal is now to have these before the project implementation and goals.**

  - **State of the art.**

  - **User groups.**

  - **Project requirements.**

- **Change Chapter 4: Project Requirements into Chapter 4: Project Requirements and Project Limitations.**

- User group is a chapter about what and who is the user group.

- Who is this project target audience.

- Try analyzing the 5W + 1H definitions from the user groups.

  - What?

    - What are is the user groups?

    - What are the user groups do?

    - What are the user group cannot do?

    - What are the differences between the user groups?

    - What situation does people can use this alternative version to sociometric badge?

    - What kind of knowledges are necessary to make this alternative version to the Sociometric Badge?

    - What kind of help does the social scientists need to offer to the makers?

    - What kind of help does the makers need to offer to the social scientists?

    - What kind of information are necessary for the maker to know from the social scientists?

    - What kind of information are necessary for the social scientists to know from the maker? The answer for this question will mainly about the technical limitation.

  - Where?

    - Where do each of the user groups works?

  - When?

    - When do I need to define the user groups?

- Why? **"Why" is actually the most important part of any scientific research.**
  - Why does social scientists need an alternative version to the sociometric badge?
  - Why does makers need an alternative version to the sociometric badge?
  - Why does this project need to be as portable as possible?
  - Why this project needs to be as simple as possible?
  - Why this project needs to use popular development kit?
  - Why not the social scientists just buy the official sociometric badge? **At this point I realize that the time necessary to make the alternative version of the Sociometric Badge needs to be faster than the shipping time for the official Sociometric Badge to reach Europe from Boston, USA (Humanyze is the name of the company that made the Sociometric Badge).**
  - Why there is no low – power WiFi module?
  - Why don't this project uses ZigBee or low – powered IoT solution?
- Who?
  - Who are the user groups?
  - Who are the tester?
  - Who am I?
  - Who will get the benefit from this project.
  - Who can make the alternative version to the Sociometric Badge?
- How?
  - How much does this project cost?
  - How much does the Pedge costs?
  - How to make Pedge?
- **<mark>Do not mention</mark> the user group just yet in the State of the Art.**
- **However, please <mark>make sure that the table</mark> in the State of the Art can be compared to the Pedge.**
- **<mark>Make</mark> the table simpler.**
- **<mark>Define the Pedge</mark> column and row first when defining the table for State of the Art.**
- **<mark>Make the appendix</mark> for tutorials and documentation.**
- **<mark>Remake</mark> the State of the Art to be as basic and as simple as possible.**
- **For the State of the Art table it will mainly about inputs, connections, and <mark>data storage</mark>.**

- Everything else in the State of the Art will be in the paragraph.
  - Features.
  - <mark>Popularity.</mark>
  - Form.
- **<mark>Make</mark> user interaction column or user feedback column.**
- **From meeting with Elze, I need to make sure that the project goal is in higher level due to different understanding between each user group.**
- Now I need to define the introduction again for the Chapter 2: State of the Art.
- What should be tell in the introduction are these.
  - Structure of Chapter 2, perhaps in the end of the introduction for the State of the Art.
  - The qualities that this paper are looking from the implementations.
    - At this point there are two qualities.
      - Usability, which determine the features those each implementations has.
      - The simplicity, how simple and accessible it is for the maker to make the implementation.
- However, the term of usability and simplicity seems odd to hear to define what I want to tell.
- Now I need to go delve etymology.
  - Usability, as it is in http://www.dictionary.com/browse/usability defines as how convenient it is to use a thing. I think this is might fit with I want.
    - What is convenient when using technology?
- At this point I was desperate enough on determining if my words need to based on assumption or with a fact.
- Even if there is a fact related found, I would have itchy finger to found if there are any other scientific paper related.
- Anyway, here is my attempts to make new introduction paragraph for State of the Art.
- Hello, welcome to Chapter 2: State of the Art. The main point of this chapter is to find out what are similar device.
- The aim of this project is to set an example on what kind of technology could be used to make an alternative version to the Sociometric Badge.
- When searching on what kind of technology those are good to look.
- This project is looking toward two qualities when looking for State of the Art. The first quality to look is the features that each implementations have.

- The second quality is how friendly it is to make from the maker perspective.

- The both quality might not be easily worded.

- This project aims to make an alternative version of the Sociometric Badge. This chapter will look through similar implementations of the Sociometric Badge. The goal of this chapter is to tear down every features those each implementations has and then groups these features based on the functionality.

- At its simplest, the Sociometric Badge is a collection of sensors that bundled together with its supporting environment. There are two kind of sensors in real – life data gathering. One sensor is used to take quantitative data (for example, pitch, volume level, …). Whereas the other kind is sensor that gives context to the quantitative data. The later kind of sensors usually returns a boolean or string type data.

- So there are two kinds of sensors when you want to measure the interactivity of something. The first sensor deal with quantitative data while the other kind of sensor deal with data that gives context to the first kind of sensor.

- In this paper there will be two kinds of sensors.

  ○ Quantitative sensors.

  ○ Context sensors.

- Quantitative sensor is a sensor in traditional term, it returns a number from continuous world to discrete.

- Context sensor is a sensor that gives context to the quantitative data. Usually this kind of sensor returns boolean or string.

- An example case for both kind of sensor, there is a man running, it is detected from his global positioning that he runs 40 kilometers per hour, which is very fast. However, this does not give so much context on what actually is happening. He runs fast could imply a lot of activities. He could be running casually, he could be chasing someone who stole his wallet, or he could be chasing a departing train. Implying only speed gives nothing on context. On the other side, interaction implies that there will be at least two party doing and taking activity from one to another. Perhaps, if the interaction is one to one the context would be clear. However, context cannot be inferred easily with one to many interaction. More so, having human observant would not solve this problem either due to potential bias. Hence, another "context – given" sensor will be necessary to measure the interactivity that involves human.

- The structure will be introduction on what is the state of the art, the definition, and the goal of state of the art.

  ○ And then proceed to explaining what are the sensors.

  ○ The sample case.

  ○ And the data storage.

- This chapter will deal on similar devices to the Sociometric Badge.

- This chapter will deal on similar implementation to the Sociometric Badge.

- Should I use implementation or device?

  - I think I prefer device, actually, it is shorter than implementation. More so, because this projects aims to create a similar thing to the Sociometric Badge. The "thing" mentioned here is always refer to device.

  - That, unless I will make an application for this project. Which is very unlikely.

  - I will stuck on making a device for this project.

- This chapter will deal on similar devices to the Sociometric Badge.

  - This sentence is not perfect (just like my English).

  - So, what should I do?

- So, I need to refer to this chapter.

- This chapter refer to the Chapter 2: State of the Art in general.

- However, "this" sounds indefinite. "This" could refer to anything else.

  - But, I mentioned "this chapter".

- How can you make an introduction to a new chapter in more formal manner?

- Many examples I see from Google show that many introduction paragraph usually start with definition.

- Perhaps, it would be better to explain what is the definition of State of the Art.

- State of the Art refer to a chapter where the researcher explain all previous similar implementation. And then, define whether or not there are a gaps/holes that can be fulfilled with their paper.

- But, I think I should not mention the real definition of the State of the Art.

- I need to more introduce State of the Art as it is in this paper.

- So, in this paper State of the Art would be a chapter to define the examples for this project to looking to.

- This chapter will look through implementations, both from the past into recent, those would define requirements for this project.

- By looking through similar devices, this paper will be able to determine which gap to fills in this paper.

  - Bad sentence!

- With looking through implementations, ….

- This chapter will be about studies of previous implementations. The implementations this paper is looking are anything those are related to Sociometric Badge in term of connectivities, functionalities, and forms.

- This project aims to make an alternative version to the Sociometric Badge.

- This paper aims to make an alternative version to the Sociometric Badge.

- Sociometric Badge is the best way to track interactivity within a predefined space (mostly office).

- State of the Art offers an insight on previous to recent implementation of Sociometric Badge.

- Alright people, now how can I make a damn good simple and straightforward paragraph.

- In my idea, there would be a paragraph that is modular, so it can be fitted with any possible points that the writer would find the future.

- This project aims to make an alternative to the Sociometric Badge that is purposed as a social sensor. This chapter will look into possible implementations those are similar or related to Sociometric Badge. The main idea is for this chapter to set something to look for during the development of the alternative Sociometric Badge.

- There are four different kinds of implementation those will be discussed in this chapter. At first, there are wearable devices those were made with the same intention with the Sociometric Badge. The second category will be commercially available wearable devices those are not necessarily to be as the same principle as the Sociometric Badge but can be used as social sensor. The third category will be anything that have at least a feature that could make Sociometric Badge better. Last category will be the basic platform, both hardware or software, that could be used as a development platform for the alternative version of the Sociometric Badge this project is going to make.

- This project aims to make an alternative to the Sociometric Badge that is purposed as a social sensor.
  - What I want to tell from the sentence is that I am making an alternative version to the Sociometric Badge.
  - But the goal of the device is different from the main example.
    - The main example is the Sociometric Badge.
    - The goal of the Sociometric Badge is as a tracking device for people in an office environment.
    - The goal of **this** project is as a social sensor tool for the Social Scientists.
  - At this point I am trying to fix "This project aims to make an alternative to the Sociometric Badge that is purposed as a social sensor. " sentence.

- This project aims to make an alternative version of the Sociometric Badge. <mark>However, the alternative badge will be purposed</mark> as a set of sensor device to help people conducting social observation.

- What if try to explain the goal of the Sociometric Badge first? <mark>Sociometric Badge is aimed for company that want to do analysis and optimization on their human resources. This project aims to make an alternative version from the Sociometric Badge. However, the purpose of the device will be for helping social scientists conducting social observation.</mark>

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