Introduction Document 1. Mikael Pratama Kristyawicaksono (S1240179).

This document are for me (Mikael Pratama) and for Mr. Else and Ms. Khiet. There are four things that I personally want to discuss.

- 1. Form of communications.
- 2. Schedule and objectives.
- 3. Technologies.
- 4. Topics.
- 5. Agenda for next meeting.

1. Form of communications.

1.1. Tools.

- **For normal conversation: Email.** For usual conversation I would like to use email because we have been using email for regular conversation. Moreover, with email I can easily CC or forward to other important people.
- **For to do list: ToDoIst (**<u>https://todoist.com/</u>**).** I have using ToDoIst application for several years now. The cons is that ToDoIst cannot be shared with people that has no ToDoIst account. There is no feature to have public to do list. So, for work around I publish my to do list in my TagSpaces as well.
- For documentations: Hosted TagSpace (<u>https://www.tagspaces.org/</u>), I have been using TagSpaces as replacement for my Evernote for six months as my personal Wiki. I will host my TagSpaces in my server on <u>https://notalentgeek.com/tagspaces</u>. However, due to circumstances my server is now on halt and will be resolved this weekend for sure.
- For sharing documents: Dropbox (<u>https://www.dropbox.com/</u>) or GoogleDrive (<u>https://www.google.com/drive/</u>)? I am not big fan of these two, but I can use either of those to share documents seamlessly.

1.2. Frequency.

- I will always communicate daily (weekday) at least one email or more. My email will be about the project log, like what is I am working currently and if I have problems or questions. My email will be everything that is on my TagSpaces. So in case both you are too bothered with emails you can always neglect my email and see the progress I made later on my TagSpaces online.
- ToDoIst will be updated every time I complete something or have new assignment. The updated ToDoIst will be in TagSpaces after midnight.
- TagSpaces would be filled with a lot of document, more or less one document everyday (except holiday). However, since there is no recent documents showed in the TagSpaces, you both can always refer to my email to know what kind of documents are new in my TagSpaces.

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2. Schedule and objectives.

2.1. Nearby objectives:

- Signed project description between me and both of you.
- Meeting next week (between 9 October 2016 to 14 October 2016) to discuss these.
 - Topic.
 - Context.
 - Scope and limitation.

2.2. Casual objectives:

- Literature studies.
 - Articles.
 - Books.
 - Papers.
 - \circ $\,$ Person to interview or to have dialog with.
 - Topics (then I will study it independently).
 - Other medias (YouTube video, ...).

2.3. Schedule.

I suggest we meet regularly every week once or twice. My preference is on every Tuesday morning or in the afternoon after lunch break (between 08.45 to 14.00). But I welcome your preferences as well.

3. Technologies.

During meeting between you last week and today I did search for complementary technology to use. Some of these are obvious and well known, while some others are not. I do have experiences on all of these but D3JS and OpenCV/SimpleCV.

- Arduino Mega (<u>https://www.arduino.cc/en/Main/arduinoBoardMega</u>), easiest hardware controller to prototype something physical.
- **D3JS** (<u>https://d3js.org/</u>), visualization tool for web application.
- **Heroku** (<u>https://www.heroku.com/</u>), to host web application cheaply.
- Linux (Arch/Debian/Raspbian/Ubuntu), the most well known and versatile computer operating system.
 - **Arch** (<u>https://www.archlinux.org/</u>), flexible distribution of Linux and rather difficult operate for the first time.
 - **Debian** (<u>https://www.debian.org/</u>), in my opinion the most stable Linux (not so hard but also not so bloated).
 - **Raspbian** (<u>https://www.raspberrypi.org/downloads/raspbian/</u>), Debian made for Raspberry computer.
- MongoLab (<u>https://mlab.com/</u>), cheap database hosting.
- **NodeJS** (<u>https://nodejs.org/en/</u>), server side scripting for web application. Can be turned into desktop application as well (for example TagSpaces is a web application that is ported into desktop application).

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- **OpenCV** (<u>http://opencv.org/</u>), computer vision framework. If so I planned to use this to detect lip movement from user of the real time application I mentioned in our first meeting.
- **OpenFramework** (<u>http://openframeworks.cc/</u>), visualization frameworks based on Processing with C++.
- **Processing** (<u>https://processing.org/</u>), for visualization in Java.
- **P5JS** (<u>https://p5js.org/</u>), for visualization in canvas based web application.
- **Python** (<u>https://www.python.org/</u>), for automation.
- **RaspberryPI 3/Zero** (<u>https://www.raspberrypi.org/</u>), used for developing the said real time Sociometry Badge, with microphone and sound processing.
- **SimpleCV** (<u>http://simplecv.org/</u>), dumbed down version of OpenCV with the essential of computer vision.
- SocketIO (<u>http://socket.io/</u>), real time communication framework for web application.
- **TrackingJS** (<u>https://trackingjs.com/</u>), literary the simplest computer vision framework made for web application.

4. Topics.

Last meeting we have two topics.

- Making a desktop application with real time analysis for meeting or casual conversation.
- Making hardware prototype of the Sociometry Badge that can transfer data in real time.

5. Agenda for next meeting

I hope I can meet both of you again this week Friday or early of next week, mainly to finalize things so that I am certain I will do my final assignment from both you.

I have these questions that I would like to ask.

- What is the context of the project? Is it more into hardware/interaction/software/visualization/combination between these?
- Do you have some pointers to give me?
 - Articles.
 - Books.
 - Papers.
 - Person to interview or to have dialog with.
 - Topics (then I will study it independently).
 - Other medias (YouTube video, ...).
- When are your preferred schedule for weekly meeting?
- Do you have other preferred form of communication (email, meeting, Skype, Facebook Group, ...)?
- What are your expectations to me in ideal case scenario?

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