Saint Louis University
Parks College of Engineering, Aviation, and Technology
Junior Design - ECE 3090

The Project Notebook and Team Meetings

Charlie Coleman
Victor Alvarez
Michael Eagleton

February 6th of 2018

Introduction:

The purpose of this exercise was to analyze two project notebook samples from prior engineering students using a questions and answers structure in order to demonstrate good project notebook procedures, while ensuring that the notebook can be used as a legal document to protect a design's intellectual property. Also, the analysis of the two notebook samples provided a glimpse of what not to do when writing a project notebook.

Notebook Analysis:

Notebook 1 (pages 52 - 66 only)

1. Is this notebook legally defensible? Information is obliterated multiple times throughout several pages (pages 56, 58, and 63 - 65). All entries are dated, however, many are missing initials, therefore, this notebook may not be legally defensible.
2. Are the annotations appropriate? Most entries contain a suitable amount of information, but not all.
3. What is the engineer's overall responsibilities for this design? It appear that researching patent laws, and the communication system of the design are some of the engineer's responsibilities..
4. What work did the engineer accomplish? Design methodologies for communications between satellite and a ground station for various tasks, such as the system's health & GPS. Also, the development of pseudocode used to implement these functions, and the researched of different processors to be used on a satellite.
5. What is the engineers current action item? Learning freehand sketching with a perspective.

Team Meeting Questions

6. What are the logistics? For the meeting on October 18th of 2005 (page 55), the engineer annotated some of the logistics such as date, however, the time, meeting place, and who was present is missing.
7. What is the agenda? The agenda is to talk about batteries, solar cells, a camera, communications, and others (pages 55 - 56).
8. What progress/accomplishments did this engineer report? Basic command protocols (page 58 - 60).
9. What notes did this engineer take at this meeting? The engineer annotated the brainstorming ideas, including calculations about some sort of satellite to be placed in orbit, and its communications protocols (page 57).
10. What are the engineers action items to be reported on at the next meeting? The conceptual design is annotated to be due on the next meeting (page 57). Additionally, the main communication goals were established to be a series of typed messages, GPS location, and pictures (page 58).
11. Was a design work summary reported? If so, what did it entail? This meeting included a summary (page 63), in which the team decided to use the Atmel AT91RM9200 development kit. Also, a listing of the key advantages of the chosen kit were annotated.

Notebook 2

1. Is this notebook legally defensible? Most of the pages are dated and initialled. Some pages are missing either a date or an initial and the position of the date and initial is not consistent from page to page. Blank spots on pages are crossed out dated and initialled. Some of the notes have very small portions scratched out, however, it is obvious that these scratches are single letters and made in an effort to correct spelling rather than conceal or omit information. Overall, while not extremely neat, this notebook seems to be legally defensible.
2. Are the annotations appropriate? For the most part the annotations are appropriate. They are usually short and to the point. There is a portion in the notebook where he writes several long paragraphs while attempting to make up for information he failed to record several weeks earlier. As the notebook goes on his annotations become less quantitative. Overall, the annotations could be improved.
3. What is the engineers overall responsibilities for this design? The identity of the author of the notebook is not very clear. It is possible that the author is Will and refers to himself in the third person in his notes. If it is Will, he ordered to parts and assembled most of the hardware.

4. What work did the engineer accomplish? Assuming the engineer was indeed Will, he ordered the parts and the spec sheets necessary for the project. Furthermore, he assembled most of the hardware in particular the FM transmitter and the stethoscope.
5. What is the engineers current action item? The engineers final action item mentioned in the notebook was to work on assembly of the project and related poster.

Team Meeting Questions: (Page 7)

6. What are the logistics? The date, time, and meeting place were annotated as a Skype video conference at 10:10 pm on March 18th, 2010. Also, all team members were reportedly present (Page 2).
7. What is the agenda? The annotated agenda included a presentation, report, and layout of devices.
8. What progress/accomplishments did this engineer report? Will: Built FM transmitter, did stethoscope, Tony got a heartbeat amplifier to work under good conditions, almost syncing with an Arduino board. Allison encountered a few problems.
9. What notes did this engineer take at this meeting? The engineer took notes about the presentation given. Noted that the report is due next week, therefore there is a need to compile everything, put together the docking station and parent unit, and complete the report.
10. What are the engineers action items to be reported on at the next meeting? Tony - working prototype of infant sensor pack, Will - report, presentation, testing, layouts, stethoscope, Ashley & Allison - report and presentation.
11. Was a design work summary reported? If so, what did it entail? The design summary is reported, bringing the overall presentation together, and wrapping up the main points.

Conclusion:

In conclusion, the two notebook samples analyzed are disorganized, hard to understand, and difficult to follow, since they do not closely follow the procedures shown during the project notebook's lecture. However, there was a disagreement about which notebook is overall better since they both have different flaws and strengths. For instance, notebook 1 does not have very legible handwriting, but it depicts a few decent drawings. On the other hand, notebook 2 is unnecessarily lengthy in some occasions, lacks team notes between the different meeting dates, but the handwriting is more legible, the structure is easier to follow, and it includes useful data sheet attachments.

Bibliography

1. "Engineering Notebook Guidelines*." *BookFactory*. N.p., n.d. Web. 06 Feb. 2018. http://www.bookfactory.com/special_info/engr_notebook_guidelines.html

2. https://www.edn.com/electronics-blogs/embedded-basics/4441329/10-Tips-On-Engineering-Notebooks

3. http://www.otc.umd.edu/inventors/lab-notebooks