

CHAPTER 14: KEEPING A PROJECT FOLDER

Chapter outline

- Purpose
- Content and organization

14.1 PURPOSE

Professional engineers and designers know the importance of keeping complete records of all their projects. The most common tool for doing this is the engineering notebook, which has two purposes. (1) It provides a central location for recording research plans and results, design ideas, data, notes, and sketches—all of which are used by the team and others who continue the project. Because employees sometimes leave one company for another in the middle of a project, the remaining members of the team need to have a permanent repository of everyone's work in order to move forward. In addition, companies looking to improve their existing products depend on these repositories of project-related material to fill in subsequent teams. (2) It serves as a legal record of design activity to preserve patent protection. In industry, this is often a bound notebook that serves as a legal record, and to which pages cannot be added or deleted. In some cases, including EDC, all records are now kept electronically, with emails and drawings scanned into the record.

In EDC, each team maintains an electronic project folder on Depot. As the quarter progresses, the folder will fill up with interview guides, research plans, research results, report drafts, emails, photos, drawings, and more. Think of the folder in this way: If your team won the lottery midway through the project and decided to go on vacation for the rest of the quarter, another team could use the materials in your folder to retrace all your steps, understand all your thinking, find all your research data, and quickly pick up where you left off.

Each document in the project folder should include the date and the name(s) of the person(s) who created it. Dating each document is a good habit to develop early in your career. Later, when you may engage in research that leads to patents, you will find that dated notes serve to document priority in patent disputes. Including the names of team members who created the respective documents will help your instructors (and, later in your career,

supervisors and others) determine who did what during the course of the project.

Your instructors will review your folder periodically. They'll be checking to see that the team has been following the design process, completing all tasks, and recording all results accurately and comprehensively. They'll also be looking for signs of good teamwork and individual participation, which are evident in the scope of the material in the folders, and in the initialing and dating of that material.

The project folder counts as part of your team's project management grade. It will also be used to help calculate each student's team and individual participation grades. For this reason, it's important that all team members contribute materials to the folder, and that the team scrupulously document individual contributions.

14.2 CONTENT AND ORGANIZATION

In the first quarter of EDC you will find sub-folders already set up in your team Depot folder. (Because the deliverables in the second quarter of EDC differ from the first, the organization of sub-folders that quarter will also differ.) Your instructors may want to make changes to this organization of sub-folders; otherwise, you should use the ones provided. Below is the alphabetically arranged list of sub-folders (in bold) along with the documents and other material that you should include in them.

- **Background research**
 - Initial research questions (categorized)
 - Internet and library sources and research results (you may want to create sub-sub-folders to organize this material so that it is easy to find)
 - Analysis of competitive and model products
 - Expert interview guides, notes, and summary/analysis
- **Brainstorming**
 - Brainstorming sketches
 - Brainstorming lists (initial list and clustered version)
- **Client contact**
 - Records of client phone calls
 - Client emails (both to and from the client)
 - Initial client interview guide, notes, and summary/analysis
 - Client meeting agendas, notes, and summary/analysis
- **Design review**

- Questionnaire handed out to class
- Power Point slides
- Sketches and other visuals used in the design review
- Notes from and summary/analysis of design review
- Final report
 - All drafts of the various sections of the report (including instructor feedback)
 - Final version of the report
- Mockups
 - Alternatives matrices
 - Mockup planning sheets and sketches
 - Pictures, descriptions, and operating procedures of mockups
- Performance Testing
 - Performance test guides
 - Raw data from and summary/analysis of performance testing
- Poster presentation
 - All drafts of the poster
 - Notes used for presentation
 - Visuals (besides the poster) used for presentation
 - Handout given to judges
- Project definitions
 - Initial project description from client
 - Project definition (all versions)
- Project management
 - Course syllabus
 - RAMs
 - Gantt charts
- Prototype
 - Decision matrices that led to prototype
 - Plans for constructing prototype
 - Drawings and photos of prototype
 - Prototype testing procedure and results
 - Subsequent modifications to the prototype
 - Instructions for using the final prototype
 - Information to build another prototype
 - Bill of materials

Chapter 14: Keeping a Project Folder

- Isometric and orthographic drawings (as needed)
 - Instructions for building the prototype
- Team information & standards
 - Contact information of team members
 - Weekly schedule of team members' non-EDC activities (this is helpful for planning outside team meetings)
 - Team standards (all drafts)
 - Signed student/client understanding form
- Team meetings
 - Agendas
 - Minutes
- User contact
 - User observation/interview guide, notes, and summary/analysis
 - User testing guide, notes, and summary/analysis
- Visuals
 - Photographs
 - Drawings & sketches
 - Maps, charts, & tables
 - Videos

Include clear and specific titles for the files so that they are easy to identify. For instance, instead of “Meeting_agenda,” use a more descriptive file name like “Team_Meeting _October_12_agenda_v1.”