Plan Overview

A Data Management Plan created using DMPTool

Title: Mechanical Design Project

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Copyright information:

Mechanical Design Project

This data focuses on the process of designing a product. Every team member would record all details of their work, including brainstorming ideas, design process, prototypes, optimizing process, and every small modifications.

Images (.JPG, .BMP) would record the original branstorming ideas with handwritting by screening.

3D drawing Pictures (*.prtdot, *.asmdot, *.drwdot) would record the design of components and structures and all versions of protopypes. The designers of the project will use SolidWorks 2014 to draw mechanical structures and prototype.

Print documents (.Pdf) would record the public-used document, like questinnnaires and directions.

Reports (.docx) would record the essential information in the design process, like the summaries, analyses and conclusions.

Statistical documents (.xlsx) would record the numerical data that used to analyze the design parameter and results.

A data management system will guide the team to record the data in a unified naming method, which include the information of title, subtitle, name of recorder, date, and version.

As a design project, many softwares will be applied to design and draw components. In order to make it easy to manage and apply, the team will use unified softwares as much as possible. Description documents will be created to record related information of images or special files.

Local metadata standards will be set to manage the data. Every file will be named with author, title, date and version. Users or viewer can use the file names to track the process of every step of the project.

Images (.JPG, .BMP) will record the original barnstorming ideas with handwriting. These documents can indicate how an idea start and grow.

3D drawing Pictures (*.prtdot, *.asmdot, *.drwdot) will record the design of components and structures and all versions of prototypes. The design team will use SolidWorks 2014 to draw mechanical structures and prototype.

Print documents (.Pdf) will record the public-used documents, like questionnaires and manuals.

Reports (.docx) will record the essential information in the design process, like the summaries, analyses and conclusions.

Statistical documents (.xlsx) will record the numerical data that used to analyze the design parameters and results.

This data will be available in academic websites as a typical design project example after getting permissions of all team members. To gain the access of the data, users should get an account in the academic websites and related licenses. The design team would retain the right to use and modify the data before wider distribution.

Embargo periods: Prototype documents contain the original information and patents. Users should not use them as a profitable use.

Intellectual property rights: Every member of the design team has the right to stop sharing this data.

No ethical issue will appear in the data.

This data records a complete process of a design project. Users should have some engineering background to understand or apply this data. Engineering students, new designers and project managers would be interested in this data.

Students and designers can use this data as a guide or inspiration to design mechanism according to functions.

Project managers can use this data as a template to manager design teams to finish related tasks.

This data will be stored in the team cloud drive as a backup. Team members will have the responsibilities to update and maintain this data. Team manager will check any modification of the data and make the data reviewable and integrated.

In order to help managing this data, team leader will make rules and methods to restrict the documents that will be upload to the file folders. If documents are edited by more than one team member, they should indicate the first and second author with their responsibilities and contributions.

Because of the patent problem, 3D drawing pictures will be preserved for 3 years. Prototype pictures will be transformed as 2D images to prevent plagiarizing.
