



MEC432 Technical Project

Project Specifications and Project Plan

Once the design team has completed a preliminary investigation of the client's needs, a document should be developed which defines the project specifications and the initial plan for completing the design. In MEC432 this will be called the Project Specifications and Project Plan (in MEC451 it is called a Charter).

The Project Specifications and Project Plan will be one to two pages in length and will define the scope of the project. It can be referred to during the project to limit "scope creep" and to ensure that design activities meet the project requirements. It may also be presented to the client and act as a contractual obligation to ensure that their needs and expectations have been addressed.

The project specifications include:

1. A revised problem statement that gives more detail than was originally included in the MEC432 project documents.

For example, a statement as it might appear in a project document would be:

Case Study #1: Page-Turner for the Disabled Through discussions with disability experts, we have identified that there is a need for a page-turner for the disabled. We plan to come up with a solution for this problem.

And a more detailed statement as it might appear in a project specification would be:

We intend to design a page-turner for the disabled that will turn the pages of a hardback or paper-back book (no 3-ring binders) as large as 8.5 × 11 inches and as small as 4 × 6 inches, up to 2 inches thick, not weighing more than about 6 lb, back and forth, but one single page at a time. Turning multiple pages will be an added bonus. The page turner is not recommended for rare books. It will be designed for disabled individuals who for one reason or another do not have the capability to turn the pages of a book. The user will be able to provide at least two distinct signals to the machine. The selling price of the final product will be about \$500. We want the page-turner to be reliable and easy to use. We plan to have a working prototype in about 6 months from starting date.

2. A list of objectives or attributes that the client hopes the device will have. This should be as exhaustive as possible; include everything!
3. A list of constraints, which are strict limits within which the device must remain. Common constraints are size, weight, cost, speed, electrical or hydraulic power available, applicable codes, etc.

The project plan includes:

1. The project deliverables and their due dates.
 2. The design activities and time frame to meet the deliverable schedule.
 3. The resources available for the project. These can be people, computer software and hardware, testing facilities, libraries and organizations, etc.
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