

Grade 8 Technology.

“Interfaces”

Design Task:

Computer users with disabilities often have to go to great lengths to get a similar user experience to those without disabilities, usually through the purchase of specialized hardware and/or software. Can we find a way to improve on what’s already available on the market for these users?

You will be designing a physical interface for a database system (ProDesktop), as well as a database to go with it (FileMaker Pro).

You will follow the Design Cycle and produce a Design Folio to accompany your interface. Below is a check list for your Design Folio:

Front Page	
Contents Page	
Design Cycle	
Gantt Chart	
INVESTIGATION	
Statement of Problem	
Design Brief	
Brainstorm	
Specification	
Product Analysis	
Market Research (Survey)	
Research:	
- A physically limiting disability	
- Existing user interfaces	
- Materials	
- Construction Techniques	
IDEAS & PLANNING	
Initial Ideas	
- 3-4 Annotated Sketches	
- Sketch of Final Design	

Final Design	
- Pro-DeskTop Design	
- Filemaker Pro Interface Design	
Materials List	
Production Plan	
CREATE	
Process Journal	
EVALUATION	
Product and Process Evaluation	
Bibliography & Resources	

Class resources for this project are available for you on the Westminster Technology Weblog:
http://www.southbank.net/blogs/subjects/westminster_tech/

Statement of Problem & Design brief:

You should begin by explaining the task you have chosen or the problem you hope to solve by designing and making your product. One way of doing this is to clearly explain the factors you need to consider when designing your product.

- The purpose of the product.
- The type of people who would use the product.
- The environment the product would be designed for.
- Any constraints or special considerations which will influence your design.
- How the product would be manufactured commercially.

When writing a design brief chose the words that you use carefully. It is best not to make your design brief too detailed because this can place restrictions upon your design. For example, instead of writing:

“Design and make a pencil box”

it would be better to say something like:

“Design and make a small storage container for writing equipment”

Specification:

A specification is a statement that tells the designer exactly what the product has to do and what the design requirements are. A specification will always:

- Describe what the product has to do.
- Describe what the product will look like.
- Include details of any other requirements.

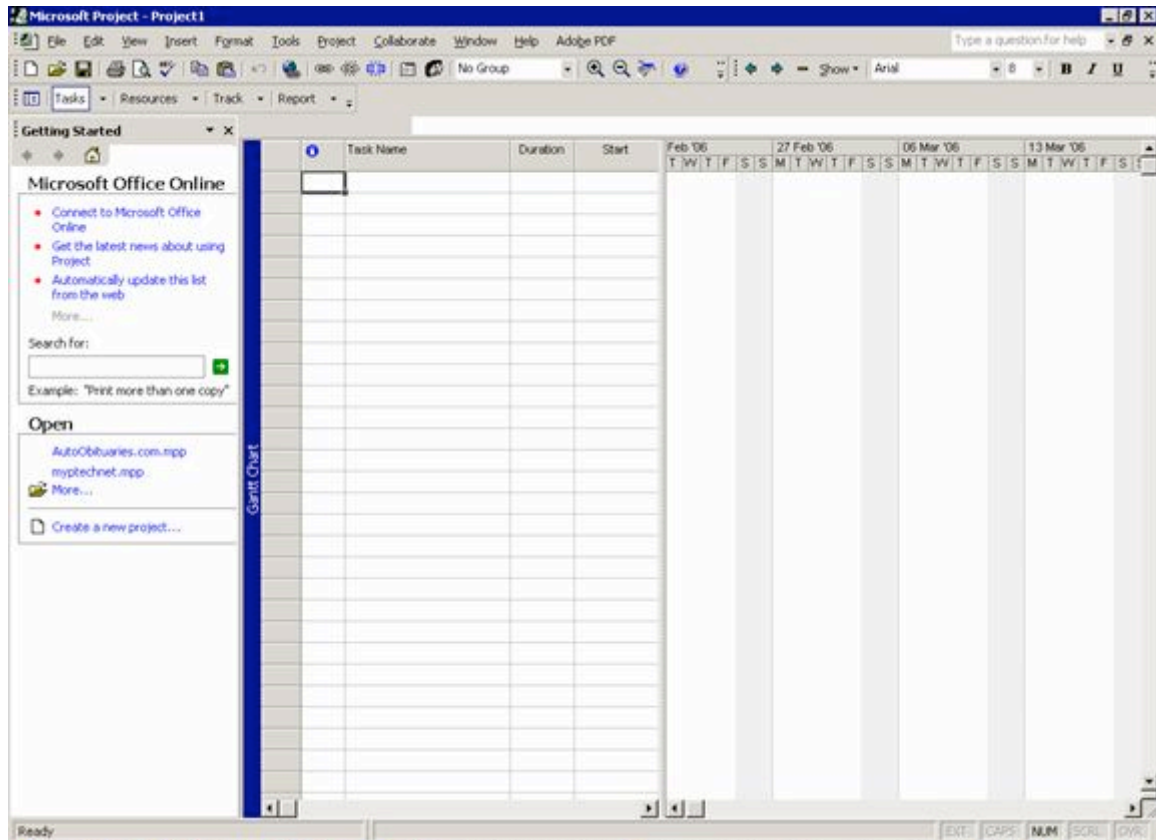
A detailed specification should include the following:

- The function of the product.
- The overall dimensions of the product.
- The main materials to be used.
- An outline of the appearance of the product.
- User requirements and target market.
- Technical details in needed.
- Anthropometric and Ergonomic considerations.
- Safety and environmental considerations.
- Approximate cost of the product.

What's a 'Gantt Chart'?

A **Gantt chart** is a popular type of bar chart, that aims to show the timing of tasks or activities as they occur over time. Although the Gantt chart did not initially indicate the relationships between activities this has become more common in current usage as both timing and interdependencies between tasks can be identified.

Below is a screen capture of a Gantt Chart from Microsoft Project:



You can see how tasks in a project are plotted out and planned. Think about how long each part of your project is going to take and break it down into smaller, manageable tasks.