 

## Project I: Personal Digital Assistant

### Introduction

"Windows 95 is the most over-hyped product in the history of personal computers--and we ought to know because we brought you the Newton."

--an Apple Computer Marketing Executive

There is no definitive answer as to why the Newton failed as a product. Detractors site the cost, the interface design, the handwriting recongition technology, and also claim that the consumer need was misunderstood. Supporters of the product acknowledge some of these problem areas, but maintain that the biggest reason the Newton failed was not that it was a bad product, but that no product could have lived up to the Newton's pre-release marketing hype.

You will now have the opportunity to consider these issues and develop your own theory about the Newton, because you will be designing your own version of a personal digital assistant.

### Project Scope

Develop a design for a personal digital assistant. Product design and features must be consistent with the particular context and functional environment that you have defined for your PDA.

### Project Format

This entire project, from start to finish, will be done in groups. Each group will present only one project and turn in only one set of documentation. However, in addition to his or her role within the group each individual will be responsible for documenting his or her personal experience of the project.

### Deliverables and Dates

#### Group

* **Presentation I: Context (9/12)**
  + Oral presentation of context or user group chosen for PDA as well as preliminary research regarding the product needs for the chosen functional environment
  + Written document containing problem statement and context definition, proposed product features, and estimated project budget
* **Presentation II: Preliminary Design (9/26)**
  + Oral presentation of preliminary product and interface design.
  + Written, graphical and 3-dimensional documentation of preliminary design
    - Minimum 24 US letter sized pages of form ideation
    - Minimum 6 sketch models
    - Minimum 6 interface mockups
* **Presentation III: Final Design (10/17)**
  + Oral Presentation of final proposed design including design process, hard model, and interface design mockup
  + Documentation of proposed design including problem statement,solution statement, interface mockup, ID control drawings, hard model, estimated and actual budgets

#### Individual

**Personal Documentation (10/17)**

* Design Log documenting individual experience of project. Along with design process must include budgets, time logs, and contact information
* Assessment of team members

### Project Design Constraints

The PDA is a portable tool for storing and sharing information. As such it must provide an user interface for inputting and displaying information as well as ports to allow data to be shared electronically.

#### Specific Constraints

* **Case Size:** 35 cubic inch max volume
* **Display:** LCD; B&W or Color; 12 square inch max area
* **Input Device (e.g. mouse, touch screen, keypad, etc.):** undefined
* **Components:**
  + 18 square inch circuit board
  + 27 mm diameter speaker
  + removable battery 2.75" x 0.75" x 1.5"
* **Ports:** power, phone, IR link, serial, PC/MCIA Type II

### Grading Criteria

In addition to the quality of their presentation materials, groups will be graded on their ability to define and understand a particular design context and present a proposed design which clearly addresses that context.

Individuals will be graded on their design logs and on their participation in the group process. The participation grade will be based the opinions of the instructors and the other members of an individual's group.