

PRODUCT NAME	CLASS	YEAR
Portable Audio Video Entertainment POD (PAVE)	HCI 1: Media Device Project	Fall 2003

PROBLEM SPACE

No current portable entertainment products provide a satisfying combination of audio, video, and games, with full interactivity. Radio doesn't show song description when it plays. Cannot download songs from the radio.

GOAL

Design a portable all-in-one entertainment system with XM radio, video streaming, and online game features. Provide interactive feature such as downloading songs, displaying song name, online games. Entertainment features: XM Radio, Video, MP3, Online Games.

THE PRODUCT

All the features of the Portable Audio Video Entertainment POD (PAVE) are what users need for portable entertainment device. Left and right controllers were designed for menu navigation and operation, identical shape makes it possible to switch between left and right hand control. Control and video screen have different function, control screen is available anytime but video screen is kept inside the device.

NEEDS ASSESSMENT / REQUIREMENTS

User Profile Study: Of the 15 survey respondents, 10 currently owned devices providing one of the features offered in the PAVE and 6 were interested in buying a device offering one of the features of the PAVE.

Results: 47% of survey respondents thought that adding XM radio in an MP3 player would be a desirable or very desirable feature. 20% were neutral and another 33% were not familiar with XM radio to answer the question. 89% of respondents felt that screen size was a major issue in a portable video player. Of those respondents who had portable devices to play videos in, none were satisfied with the current means of downloading videos (3 respondents).

USABILITY GOALS

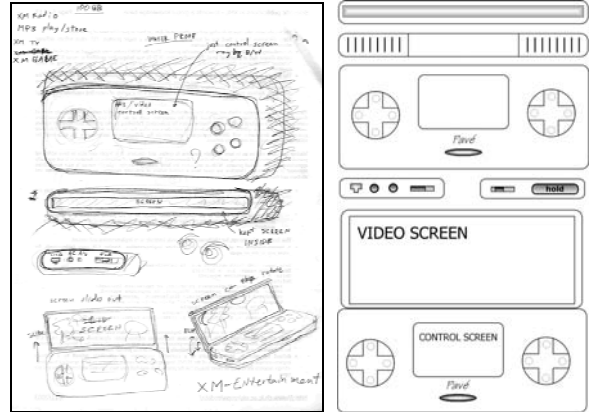
- **Effectiveness** – Dynamic prototype provides all of the intended functions in one portable device
- **Efficiency** – Problem with the menu labeling on the right controller
- **Safety** – Cannot be tested with the dynamic prototype
- **Utility** – Menus in the device did succeed in enabling the user to perform all desired functions
- **Learnability** – Problem with the menu labeling on the right controller

PRODUCT ASSESSMENT

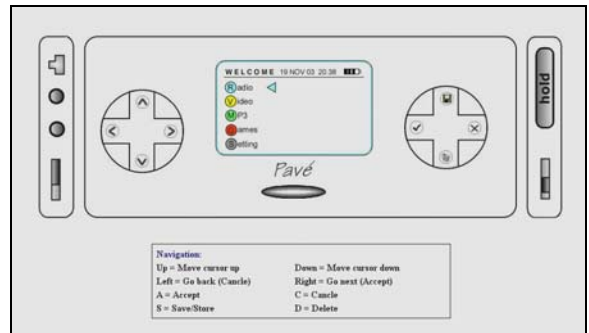
Focus Group Study: Users: 3 males and 3 females, age 25-35 years old. After introducing PAVE to the users, they tested the dynamic prototype, gave feedback, and filled out the post-test questionnaire. Feedback Assessment: Right navigation buttons A,C,S,D description were not clear, Labels were change from character to symbol, Menu button should always link back to the main menu, Should design grip on the back of the device, and Camera feature should be added.

PROTOTYPES

Paper Prototypes



Dynamic Prototypes



3D Model Prototypes

