

CS 5714

Usability Engineering

Product Concept Statements

Dr. Hartson - Spring 2004

Team Product Concept Statements For Spring 2004

Team 1

Our on-line system "Books Central" will augment the University Bookstore's website. "Books Central" will enable registered students, faculty, staff and alumni to buy and sell used books and software with credit card transactions. Additionally, registered users can place item requests, create wish lists, and have items delivered home. University Bookstore IT administrators can place advertisements and promotions on the site. "Books Central" will allow independent used book sellers to ask for the price they feel they deserve.

Team 2

The Terrace View Connection shall be a web-based communications system, which all members of the Terrace View apartment complex, residents and staff, may access at anytime to streamline specified communications, interactions, and transactions. The Terrace View Connection shall improve on an unused existing system while adding new system functions to benefit the community such as secure electronic bill payment, automated maintenance requests, resident carpool coordination, community forums, and secure online application submission.

Team 3

The SmartGym system will provide users with a personalized workout regimen while allowing the gym staff to manage equipment. Users include gym patrons, trainers and administrative staff. This system will save gym users' and trainers' time by automatically creating workout regimens. It will also aid administrative staff in making purchasing decisions based on equipment demand and usage. Disclosure of user's private information will be limited to authorized personnel only.

Team 4

The "SpeedyOrder" kiosk will be a secure automated ordering system. Located at Owens Food Court, it will allow customers to search for menus based on price or cuisine, browse specials and order food. Upon payment via credit-card / Hokie-Passport, the order will be transmitted to the respective shop(s). Shops will update item availability in real-time. An administrator will maintain the central database. The system expedites the overall ordering process by shortening queues and reducing "window-shopping".

Team 5

PetHelp will extend the current system at Companion Animal Clinic to allow the office

manager, veterinarians, and receptionists to keep records of inventory, patient records, and appointments through a GUI. PetHelp will feature notification of upcoming required vaccinations, appointments, reordering of supplies, and have the capability to perform searches based on pet and owner profile. PetHelp will reduce the number of steps needed in appointment scheduling, and inventory tracking by combining daily tasks.

Team 6

iCloning keypad is a novel user interface that will allow numeric input in a virtual environment. It will be integrated into iCloning testbed, a head-mounted-display based three-dimensional virtual environment system, to allow fast editing of parameters used for cloning. The system is designed for construction domain students, professors, designers, and engineers to do immersive design, e.g., virtual prototyping. The users can modify the distance between cloned objects by entering numbers explicitly.

Team Product Concept Statements From Fall 2003

Team 1

Nomad is a PDA-based system being designed for the Landscape Architecture Department that allows landscape architects to conduct efficient site analysis to support landscape design. By utilizing existing digital data of a site, users can concentrate on recording diverse information that can only be collected on location. Collected data can be incorporated into pre-existing digital data. Nomad increases productivity compared to paper-based system by facilitating data entry and providing better integration with existing information.

Team 2

Hoki-ePassport will be a new Web application for Virginia Tech Student Services, whose users include students/parents, Student Services' employees, and Web administrators.

The users can conduct transactions online, such as depositing money, transferring money, viewing and paying for parking tickets and library fines, and requesting building access, all of which are normally conducted through face-to-face interaction with Student Services' employees.

This will improve the current framework by reducing the wait time for users and having the users control their respective accounts.

Team 3

The Brewing Made Easy System will allow both the distributors and individual consumers of The Blacksburg Brewery to order kegs in advance. The system will feature a product inventory database, able to accurately keep track of available raw material, used materials, and complete goods. This system will reduce the employer's workload in terms of marketing, production scheduling, and consumer services.

Team 4

The AMADEUS system will be used for geologic mapping, analysis, and design of underground tunnels using virtual environments. This system will allow geologists, contractors, and engineers to plan and view tunnels before excavation, as well as to monitor vital geological characteristics during tunnel construction. These system features will increase safety awareness within the mining industry and minimize tunneling costs.

Team 5

The Munchy Manager (M.M.) will improve the communication among waiters, kitchen staff and the restaurant manager for fast and accurate customer service at Backstreets Restaurant. The system will allow real time information flow from the waiters taking customer orders, to the kitchen receiving those orders, while the manager monitors the waiters and kitchen staff to ensure that customers are served efficiently. Increased awareness by M.M. will allow waiters and managers be notified of order status.

Team 6

The Examiner™ will be a website used by the board of the American College of Veterinary Clinical Pharmacology for test creation and administration. It will allow the board to collaboratively develop questions, track question and test versions, and grade tests. Online, students will be able to apply for, and take, tests at proctored locations. The system will reduce the effort for test management and will maintain consistent and impartial procedures to prevent legal liability.