

Proposer:

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Statement of Topic: Using Social Networking to Teach New Software

Significance and Relevance of Topic:

Social networking websites have become extremely popular among college students. Over 85% of college students have an account on the social network website Facebook, and 270 photos are uploaded to the site every second. While many other research projects seek to discover why websites like Facebook are so popular, this project seeks to capitalize on this familiar environment to teach students how to use other software programs. Our project uses PHP and MySQL as its coding base and employs easily portable tablet computers that allow students to complete simple tasks through gesture recognition. This pedagogy helps students learn to operate new computerized systems not only through the familiar interface, but also through guided walkthroughs, instructor led projects, and assignments. An advantage of the social networking format is that it provides a natural way for students to stay connected. For

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example, students and professors working on collaborative projects, can use “wall writing” to update each other about what they are doing. The format also allows sharing of pictures and videos to provide visual learning. The first software created with this instructional strategy is teaching students how to use electronic health record (EHR) software. This is especially useful due to a lack of good programs for teaching EHR. Hospitals use many different popular EHR systems, and most systems are cost prohibitive for a university to purchase as a teaching tool. Also, each system has its own unique format. Thus, rather than attempting to copy a specific system, we are capitalizing on the familiar environment of social networking to introduce students to EHR. The social networking interface improves the functionality of EHR software because patients can be viewed as friends, “walls” can be used to list administered medicines and vitals, and pictures can show digital images of wounds, x-rays, MRIs, CAT scans, or ultra sounds or be used to verify patient identity. The goal of this project is to allow students to easily learn software by using a familiar environment, and then apply that knowledge to other versions of the same software.

Content: In this project, we plan to create a visual system to include:

- An easy to learn layout similar to social networking websites already familiar to most college students
- An innovative design that allows entering and accessing information with a minimal amount of clicks
- Handheld tablet computers to allow students to enter information while on

the move and complete simple tasks through gesture recognition

- Interactive walkthroughs to help students learn the software on their own
- Instructor led assignments for classroom teaching
- Functionality similar to major electronic health record systems, such as:
 - Medicine scanning
 - Patient entry
 - Patient check-ups
 - Scheduling system for visiting patients
 - Form entry
 - Lab reports
 - X-ray and other diagnostic images
 - Tables listing important patient information
 - Patient consents
 - Stream of recent events related to the patient
 - An access control system
- Programming languages PHP, MySQL, HTML, Javascript, and Flash

For presentation at ACMSE we will have:

- A basic layout prepared for learning and accessing information
- Basic learning functionality including:
 - Entering history information
 - Entering vitals
 - Processing lab reports
 - Commenting by teacher on student work
- A live demo of the project on a tablet computer at ACMSE
- A web based demo on the project website

After we have completed the project, we plan to make it available to other universities for use in their nursing programs so that all

students will have the opportunity to learn about EHR systems using this tool.

Abstract: Social networking websites are extremely popular among college students. Our project seeks to capitalize on this familiar environment to teach students how to use other computer programs. The first software we are creating with this pedagogy teaches students how to use electronic health record software. Students will be educated via the familiar interface using instructional walkthroughs, teacher led projects, and assignments. The social networking interface improves the functionality of EHR software because patients can be viewed as friends, “walls” can be used to list administered medicines and vitals, and pictures can show diagnostic images or verify patient identity.