IPRO 329 Computer Simulation for Health Physics Professionals: Development and User Testing

Objective:

IPRO 329, being a continuation of previous semesters, maintained the goal of those previous semesters: to develop a simulation of various situations that Radiological Control Technicians may deal with in their careers. The purpose of simulating these events is two-fold:

- 1. It allows for zero-risk assessment of a situation, and
- 2. It allows for practice of federal procedures without requiring a board of supervisors to present scenarios.

Basic Organization and Tasks:

The work done was divided among three smaller, specialized sub-groups. These groups, along with their responsibilities, are the following:

- Design
 - Construct scenario storyboard and graphics required for simulation
- Development
 - Create the simulation by using the Design team's work using Flash.
 - **O** Design new, flexible framework for future scenarios
- Project Management
 - Promote and facilitate communication between other two groups
 - Manage deadlines and important materials

Accomplishments:

A working, albeit incomplete, simulation was finished using the new scenario developed during the course of the semester. Usability testing, in the "Wizard of Oz" fashion, was conducted with multiple Health Physics Professionals on the simulation and received encouraging and positive feedback.

Critical Barriers and Obstacles:

The scenario chosen for this semester, "Transport and Inspection of Radioactive Materials," was extremely detailed. This, along with time constraints resulted in an incomplete, but working simulation.

Conclusion:

Using the work done by previous semesters, IPRO 329 progressed towards accomplishing our overall objective. The simulation that was being developed this semester, along with the simulation completed in previous semesters has shown great promise in training Radiological Control Technicians. This was shown by the positive feedback received regarding our simulation through usability testing with Health Physics Professionals.

Next Steps:

Continuation of this IPRO will require the following:

- Completion of the scenario "Transport and Inspection of Radioactive Materials"
- Securing of funding for promotional and developmental materials
- Begin creating a new scenario to help train Radiological Control Technicians

Faculty and Advisors:

Laura Batson, Susan Feinberg, Laurence Friedman, Anthony Mcfadden

<u>Student Team Leaders</u>: James Runge, Amit Patel

Student Members:

John Dominski, Jeff Engel, Victor Guharoy, Heajin Lee, David Olichwier, Amit Patel, Vaiibhav Patel, James Runge, Daniel Rutherford, Jay Taggart, Mikhail Zaturenskiy