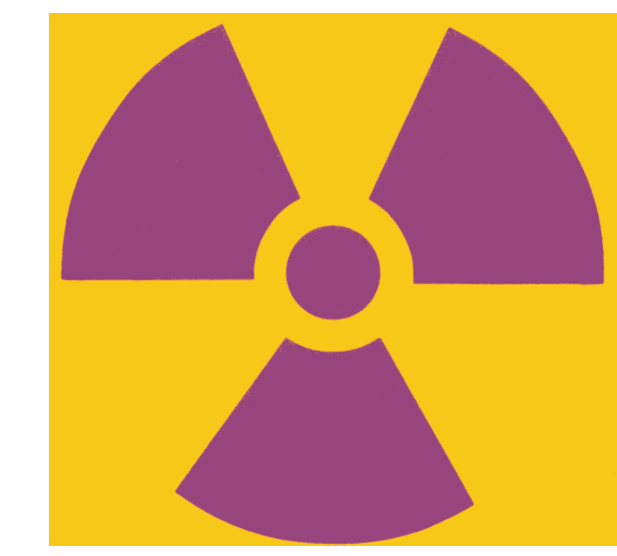


# IPRO 329 – Health Physics Computer Training Simulation



## HEALTH PHYSICS TECHNICIAN

A Health Physics Technician (HPT) is a person engaged in providing radiation protection to the radiation worker, the general public, and the environment from the effects of ionizing radiation.

## OBJECTIVE

To create an interactive visual experience that is informational and self-administrable using computer software. The final result should be a game that can be used as a training exercise or as oral examination practice for HPT's. Major goals:

- Improve graphics
- Update navigation system
- Revise scenario
- Update tools
- Refine question database

## TEAMS

Three teams were created in order to complete the objectives:

### Project Management:

- Rewrite scenario
- Research in-game tools
- Keep track of IPRO deliverables

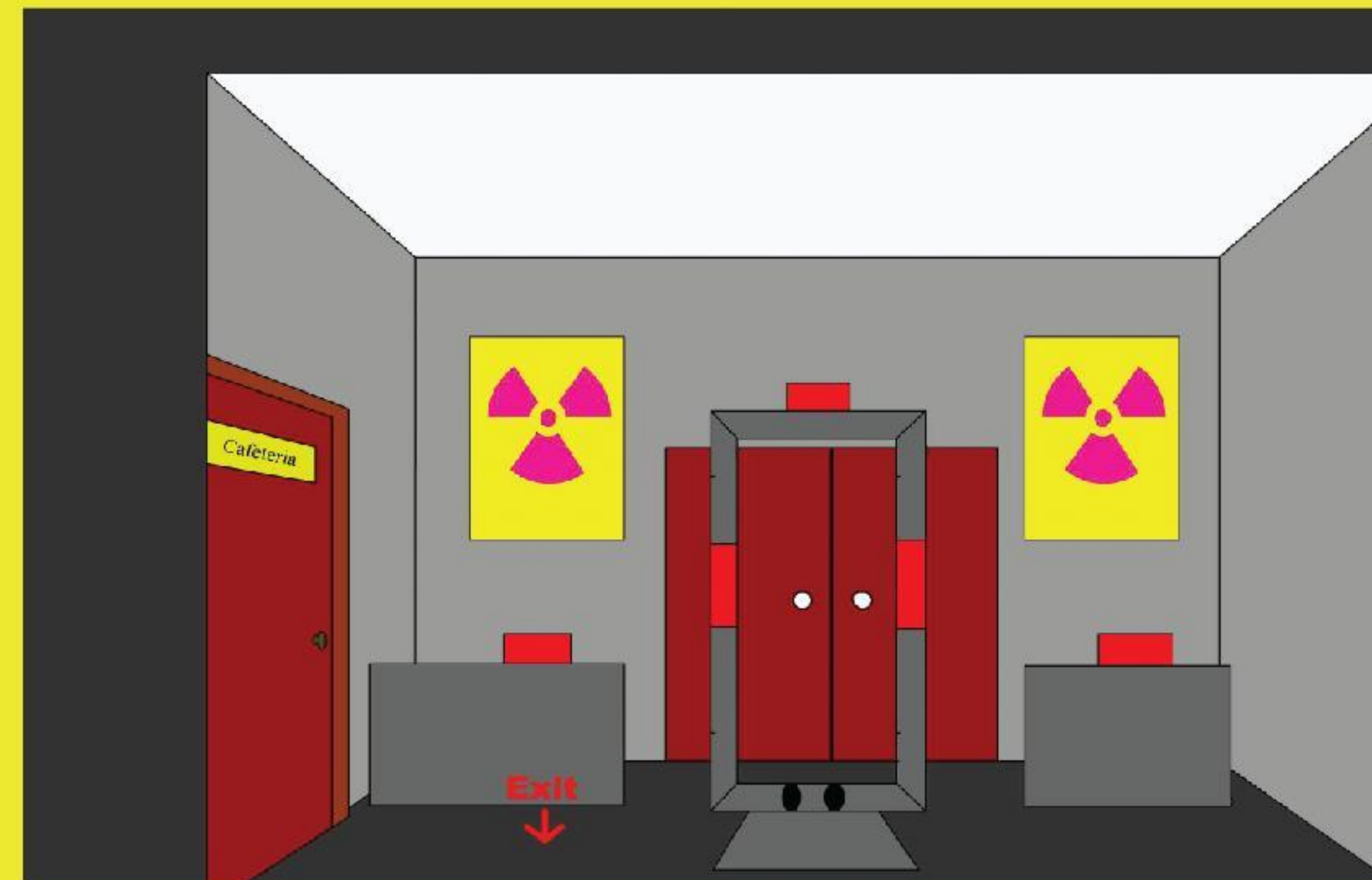
### Design:

- Improve game graphics
- Create Game CD
- Create IPRO poster and website

### Development:

- Write game code

Graphics from previous semester



Graphics from this semester



The Graphics were updated from 2D models that were modeled with flash to 3D models that were modeled with blender. The quality of the game was greatly improved by updating the graphics, as can be seen from these screen shots.

## GAME PLAY

The user determines the proper steps that should be taken to discover the source of the contamination and to clean up all of the contamination that has been left by the HPT. The user can ask the HPT questions and visit rooms in the building to uncover the mystery.

## ACCOMPLISHMENTS

- Updated scenario to be more plausible and realistic
- Converted graphics from 2D to 3D
- Updated question database for easier usability
- Improved navigation to make it more intuitive.
- Improved usability of the game tools

## USABILITY TESTING

The game was tested at Argonne National Laboratories

- 5/6 thought navigation system was useful
- 6/6 thought graphics were clearly portrayed
- 5/6 thought game play tested knowledge of the proper use of tools
- 5/6 thought the scenario tested the ability to react in real life situations

## FUTURE GOALS

The goals for this semester were completed with much success. Next semester goals include:

- Adding additional scenarios to the game
- Improving game functionality
- Marketing the game for purchase



Front Row (left to right): Natalie Hammer, Laura Batson, Greg Pulliam

Middle Row (left to right): Laurence Friedman, Joseph Lloyd, Mikhail Zaturenskiy, Heajin Lee, Jeffrey Rebaz, James Runge, Daniel Rutherford

Back Row (left to right): Michal Kaska, Joel Huish, Asad Akram, Shubhi Sharma, Ippei Iwata