Midterm Report

IPRO 329 – Edutainment

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1.0   Objectives

A. Refine the training simulation created last semester into a more robust, complete product.
   - o   Improve the simulation's graphics into a 3D more real life model.
   - o   Update the navigation systems to make them more intuitive.
   - o   Revise the game scenario to make the game more plausible.
   - o   Update the in-game tools to current tools used in industry.
   - o   Refine the question database algorithm to make the questioning easier.
   - o   Provide additional question/answer entries to the game's database.

B. Put together a final product including a final packaged game.

Updated:
   The team has not altered its core objectives since the start of the IPRO.

2.0   Results to Date

A. Describe current data results from research or testing involved in the project.
   - o   Our IPRO team has not externally tested any components of our project since the beginning of the semester, though we are working on setting up a usability test at Argonne National Laboratory towards the end of the semester in order to determine whether the potential user likes our product.

B. Define current or potential products or outputs resulting from research and testing.
   - o   Research and testing will help the IPRO to determine final details of the project that need to be fixed. After testing the team hopes to fix any problems that the users find, and then have a final deliverable game by IPRO day.

C. Discuss the current results in terms of deliverables that will be produced by the project team (i.e. a working prototype).
   - o   Our team has completed a number of tasks while working toward producing our final prototype. The design team has been working to complete the background images, and with only 7 left, they have almost completed this task. The development team has been working to update the question database to make game play easier. They have completed this task, and have also implemented several of the design teams backgrounds into the game. The project management team has developed a plausible scenario that is approved by our content advisor, and a health physics technician.

D. Discuss whether or not the current results address the problem of the sponsor/customer.
   - o   Our current progress has been guided by our commitment to producing a final product that meets the needs of our potential clients. Our content advisor has given us many useful insights and corrected any errors we have made up to this point. This will translate into a simulation that is both functional and realistic for implementation in an RCT training regiment; the main goal of our team.

E. Discuss how the current results will be incorporated into the proposed solution or solution framework.

- o Our starting point this semester, the final simulation from last semester's work, is not robust enough to function as a training game for RCT's. All the tasks we have completed and scheduled for the rest of the semester work towards our goal of enhancing the backgrounds, making the game more user-friendly, and making the scenario plausible. The new backgrounds and the additional features will make the simulation much more useful to the potential users.

3.0 Revised Task/ Event Schedule

A. Describe any changes in project tasks pertaining to the problem solution or project design.
- o The tasks have not changed drastically since the beginning of the term. The only changes are in the design team's task list. They have pushed back the date when they will have the backgrounds for the game finished to a week later. This will not effect our end goal because the design team left time at the end of the semester for website design and IPRO day deliverables.
B. Include any changes to summary tasks or sub tasks pertaining to IPRO project deliverables, list all associated due dates and/or start and end dates.
- o The design team has changed the due date for the finalized backgrounds for the game from 3/13/08 to 3/25/08. This also changes the date of when the design team can begin to design the new inventory items. These items will not take as long however, and will be completed the week after spring break, 3/24/08 to 3/31/08.
C. Include a revised estimate of hours needed and number of team members needed to complete each summary task.
- o Please see the included file, "Task Breakdown S08.xls" for an overview of our project timeline, and our individual hour requirements per member.
D. If necessary explain why the timeline has changed significantly from the original submitted project plan.
- o The only major change to the time-line since our original submission has been to the design teams completion of the background renderings. These renderings were more difficult then expected, as a few team members had no experience in rendering previously. The date has been pushed back a week, however this will not effect our goal to have a completed game by the end of the semester.

4.0 Changes in Task Assignments and Designation of Roles and Team Organization

A. Discuss changes to team organization.
- o There have been no changes to the organization or structure of out team or sub-teams. Overall the structure we started using at the outset of the semester has worked well, and task delegation and monitoring has not been an issue.

B. Define sub team or individual sub team task assignments and responsibilities.
  o The task assignments have not changed since the beginning of the semester, and a copy of the task list is attached as "Task Breakdown S08.xls".
C. Describe changes since the beginning of the semester in current team member roles within the team and sub teams.
  o There have been no changes in roles within the teams or sub teams since the beginning of the semester.
D. If appropriate, explain how and why the team organization has changed since the project plan was first formulated.
  o As stated above, the there have been no changes to the designation of roles within the IPRO, and the teams have been working cohesively together to stay on task for our goal.
E. If applicable, attach the revised Gantt chart of remaining project tasks, remaining hours and team member assignments.
  o This document has been submitted as an excel spreadsheet with the tasks and amount of hours needed, as "Task Breakdown S08.xls".

5.0 Barriers and Obstacles

A. Describe any obstacles encountered while completing the planned tasks for the project.
  o Development Team
      a. The development team is having a difficult time because in order to implement the background renderings into the game, they have to wait for the design team to complete them. At this point, they have completed all of their goals, and are waiting for the design team.
      b. The team also had a problem getting a copy of the development tool Flash, a necessary program in order to continue development of this game.
  o Design Team
      a. The biggest obstacle for the design team was learning how to use the rendering tool, Blender. Three out of the four members on the design team had never used this tool before, and needed to learn the basics before they could begin designing.
      b. The design team also ran into difficulty with the character used in game play. It was originally decided that it would not be necessary to design a new character for the new 3D backgrounds, but after reassessing this opinion, the team has decided that it will be necessary to make a 3D model of the character.
      c. Each new object had to be modeled, which added unexpected time to each room. The team did not originally realize how difficult each room would be to render.
  o Project Management Team
      a. The project management teams most difficult task was getting a plausible scenario that our content advisor and health physics

technician agreed with. The difficulty came in designing a scenario that was not only plausible, but was also capable of being designed by the other teams in the IPRO.

B. Explain how the team or sub team resolved these obstacles.
- o Development Team
    - a. Team resolved the issue of not having the backgrounds for the game, by first working on all of the goals they had for the game. They changed the question database, and made the systems navigation functions more intuitive. The design team has helped them by sending backgrounds, as they are finished in order to split up the work.
    - b. Since the team was not able to get a copy of the development tool Flash through the IPRO program, their only choice is to work on the IIT computer lab computers that already have the Flash license.
- o Design Team
    - a. In order to begin the rendering of the backgrounds the design team worked with one of their team members who had previous experience in the Blender tool. He helped his teammates to get accustomed to the way Blender works, and started them off to design basic objects. With his guidance, they have progressed through many objects, and continue to develop backgrounds for the game.
    - b. The design team has made the decision that a new character for the game will be needed, and therefore plan to design the character before the end of the semester. This has been added to their task list.
    - c. Because of the complexity of the rooms to be rendered, the design team found out very early that it would be difficult to design everything that would be needed. In order to fix this problem, they have decided to search for copyright free 3D models that are posted on the web. Since they are copyright free, the team is able to use them freely in our game, and this saves the team hours of design time because they no longer have to design each object separately, just place objects in the room that they are needed.
- o Project Management Team
    - a. In order to get a plausible scenario, the project management team met with the content advisor and health physics technician for many class periods in order to get every detail of the game planned.

C. Identify any remaining barriers or obstacles that need to be addressed before the team can successfully complete the planned work.
- o Development team
    - a. The development team has dealt with all obstacles up to this point, and does not see any more obstacles at this time for the future.
- o Design Team
    - a. Since each member has been assigned different objects and rooms to model, there may be some difficulty when the team places all the rooms together. While each member had the same tips and pointers, each room will be unique to the person who designed it, and the team wishes to have a game in which all rooms have the same look and feel.

D. Discuss how the team intends to deal with the identified barriers and obstacles.
o Design Team
   a. In order for each room to have the same look and feel, the design team plans to review every scene once the designs have been completed. They will check the look and feel and make sure that the scenes match each other, and also the scenario that they are making the designs for.

6.0   Code of Ethics

D. Discuss any ethics issues that have occurred with team activities.
   o Our team has encountered ethical issues when dealing with the programming software, Flash. In order to develop in Flash, the team needs a legal license. In previous semesters, the team members have already had the Flash programming tool, and have not had to worry about this problem. However, since none of the team members had a Flash license, the team had to worry about finding a way to legally develop in flash. The team has gotten around this issue by downloading a trail version of the Flash software, and once that license expires they will continue their Flash programming in the IIT computer labs where the have copies of Flash.
   o Please see the attached document "Code_of_Ethics S08.doc" to see a copy of our IPRO 329 code of ethics.

7.0   Midterm Presentation Slides
   o The midterm presentation is attached as "MidtermPres.ppt".