INTERACTIVE WEBSITE MODULE DESIGN

FOR THE MUSEUM OF SCIENCE AND INDUSTRY
IPRO 333

For more information
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Visit: http://iit.edu~ipro333s08

PROCESS

FROM LAST SEMESTER

Feedback from MSI
The Museum of Science and Industry provided us with comprehensive feedback. Per museum's request, IPRO 333 continued to develope three modules from the previous semester.
User Testing
We conducted an user testing at Sheridan Math and Science Academy at the end of fall semester. All three modules collected informative data from 7th grade students.

DESIGN DEVELOPMENT PHASE1

Each team created a detailed proposal as to how they would approach the development of the existing module based on the feedback from the museum as well as from the user testing.

USER TESTING (BETA)

To test the usability on modules, we invited IIT students to play the modules and answer questions.

DESIGN DEVELOPMENT PHASE2

With the direction we received from the Museum on the Phase1 proposal, development of the phase 2 continued.

USER TESTING

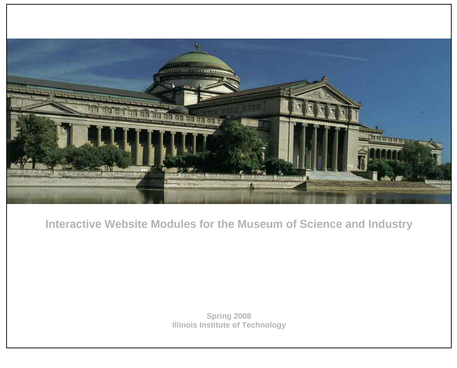
With 80% completed modules, we conducted another user testing at Haynes School to test with 8th grade students.

DESIGN DEVELOPMENT PHASE3

This was the final stage in the development. Data from the user testing was incorporated into the modules. Modules were completed and polished for the final submission.

FINAL MODULES

PROJECT BOOKLET



Please refer to the project booklet for more information.

ABOUT THE PROJECT

PROJECT BACKGROUND

- This project is sponsored by the Museum of Science and Industry (Chicago, Illinois).
- The Museum of Science and Industry (MSI) contacted the Illinois Institute of Technology's Interprofessional Projects program about enlisting a student team to develop content for their website (http://www.msichicago.org) over the course of two semesters (Fall 2007 and Spring 2008).
The team has been asked to create one to three interactive modules for the website. These modules will support basic science instruction for seventh and eighth grade students.
- MSI has recognized the need for a modern web presence, which has led them to ask the IPRO team to develop interactive content.
- The developed modules will be incorporated into MSI's website re-launch in 2008.

PROJECT OBJECTIVES

- The project will engage users of the Museum of Science and Industry website and is intended to raise the number of users for the museum website.
- IPRO team will design interactive and educational modules for an 8th grade audience.
- Each module will reflect specific scientific themes, based on research and analysis
- Modules will aid teachers, parents, and students with 8th grade curriculum
- Modules will supplement preexisting or future exhibits at MSI

PREVIOUS SEMESTER (FALL 07)

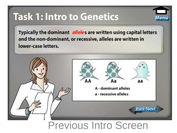
- Research
  : Students researched 8th grade curriculum, textbook and other related websites in pursuit of ideal science topics for modules.
- Schematic Design
  : We formed three teams to develope nine initial ideas for modules, using different topics such as energy, sound, genetics, force and machines.
  : Based on research, we found *Genetics*, *Energy* and *Machines* as suitable topics for interactive modules.
- Design Development
  :Genetics team focused on the topic of human trait through quizzes. The learning takes place in a genetics lab.
  :Energy team focused on harvesting sustainable energy and raising the awareness of global warming.
  :Machines team focused on simple machines including pulley and gear, which are part of a cake making machine.
- User Testing
  :User testing was conducted at Sheridan Math and Science Academy with 7th grade students.

PROGRESS/MAJOR CHANGES (SPRING 08)

GENETICS

- Simpler Background
  : Elimination of 3-dimensional background.
- Character Changes
  : More easily identifiable characters.
- Topic Addition
  : Heredity human traits such as hair color.
- Survey Addition
  : Survey for students to study their own genes and traits.

Previous Menu Screen



Previous Intro Screen

Previous Task Screen

New Menu Screen

New Intro Screen

New Task Screen

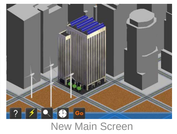
ENERGY

- Energy figures that correlate with each sustainable power source
  : Wind, Solar (Sustainable) and Electricity (Conventional) Energy
- Extensive research on each energy source
- Shorter and simpler introduction
- Updated images


Previous Menu Screen


Previous Main Screen

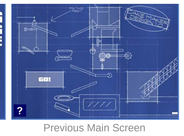
New Menu Screen


New Main Screen

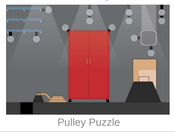
MACHINES

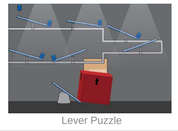
- Machines has changed their entire concept and redesigned the module.
- The module has three games, which will help students to learn mechanics behind simple machines.
- Simple machines include pulley, lever and inclined plains.
- The module takes place at the Museum of Science and Industry where the player enters an exhibit under construction.

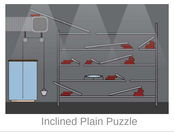
Previous Starting Screen



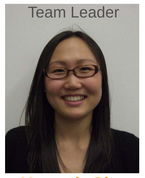
Previous Main Screen


Pulley Puzzle


Lever Puzzle


Inclined Plain Puzzle

TEAM MEMBERS


Team Leader
Hannah Cho
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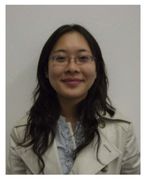
Subteam Leader
Marc Huh
3rd year MBB


Subteam Leader
Daniel Price
4th year CS/CPE


Subteam Leader
Monica Smith
3rd year HUM

Joseph Kaiser
3rd year CS/PS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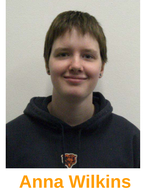
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