IPRO 333

Interactive Website Module Design and Development for the Museum of Science and Industry

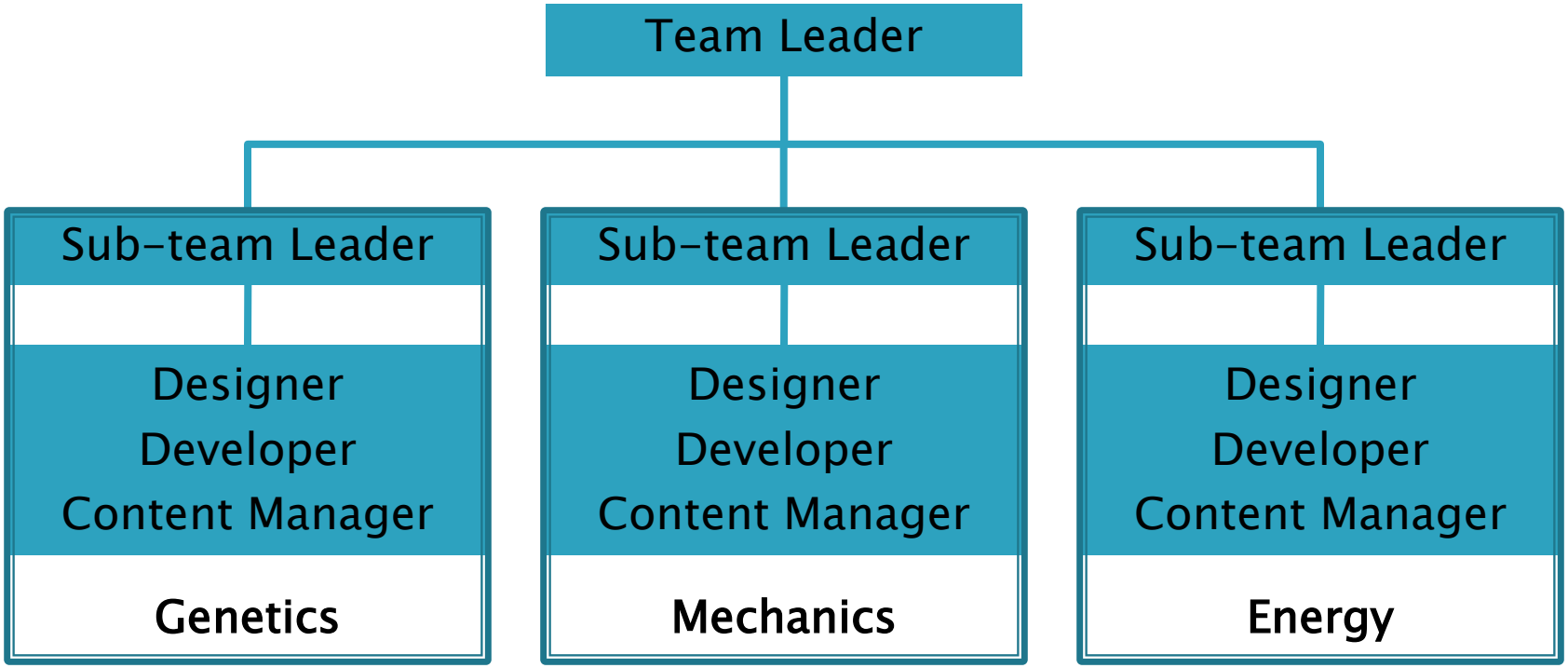
Statement of the Problem

- The Museum of Science and Industry would like to increase user interactivity on its website.

Goals of the Project

- We will continue to develop interactive and educational modules for an 8th grade audience.
- Each module will reflect specific scientific topics based on research and analysis.
- Modules will aid teachers, parents, and students with 8th grade curriculum topics.

Organization of the Team



Progress Toward Goals

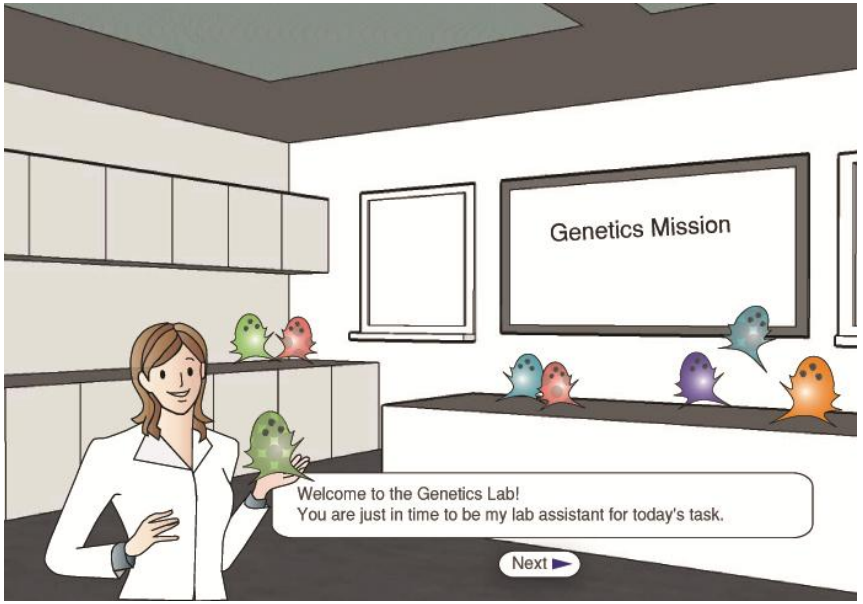
- Semester 1
  - Research and Analysis – Textbooks, curriculum and other interactive websites
  - Schematic Design – Initial nine ideas
  - Design Development – Development of top three ideas: Genetics, Machines and Energy
  - User Testing
  - Feedback from MSI
- Semester 2
  - Design Development – Reflects concerns and recommendations from the museum's feedback.
  - Continue to develop three modules to the final stage
  - More user testing to ensure quality

Genetics Module

- Purpose
  - Our purpose is to develop a genetics module that teaches 8th graders about simple hereditary and sex-linked traits.

- Obstacles
  - Reducing text while keeping the content informative.
  - Keeping the content and complexity age appropriate.

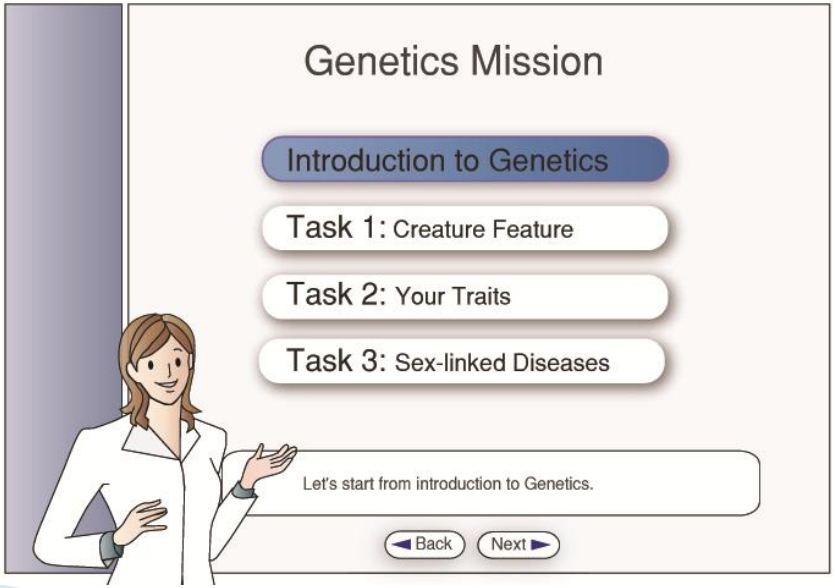
Old Laboratory

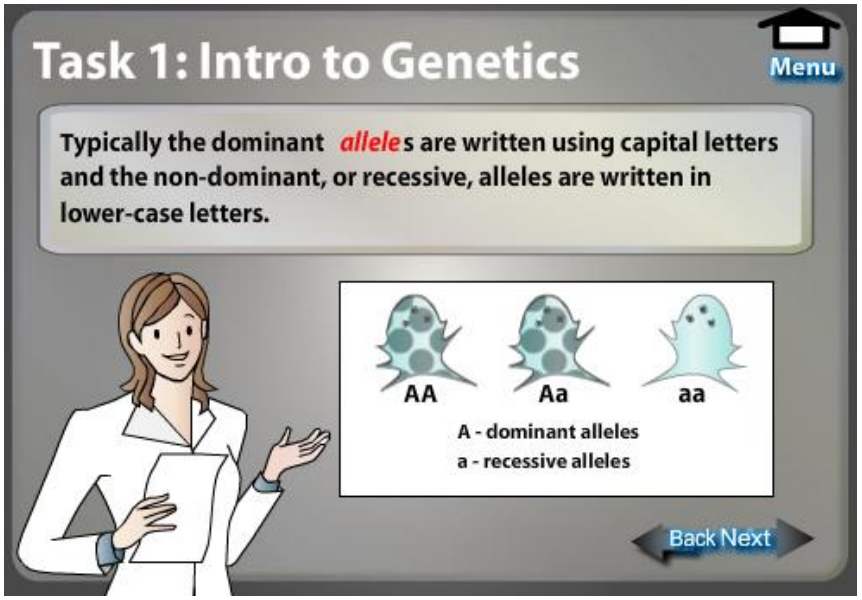


New Laboratory

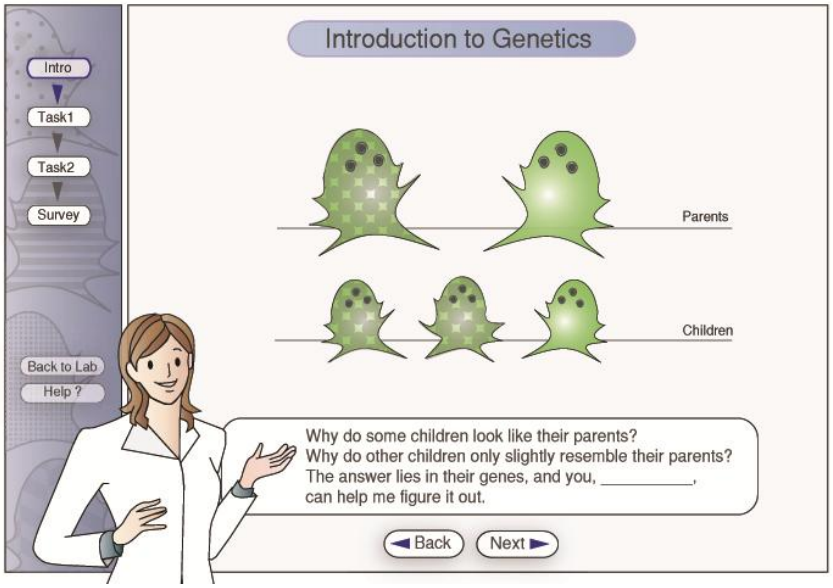
Old Menu

New Menu



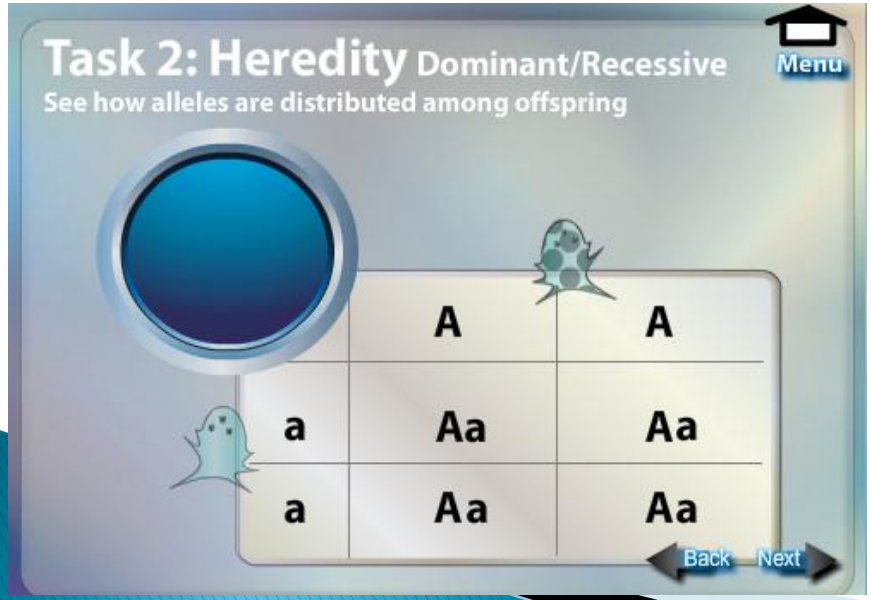


Old Introduction

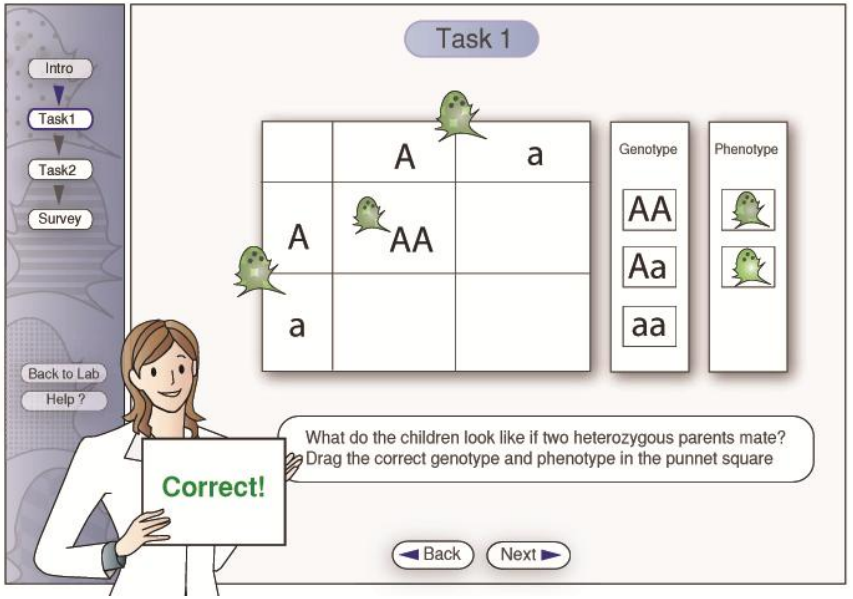


New Introduction

Old Task 1



New Task 1

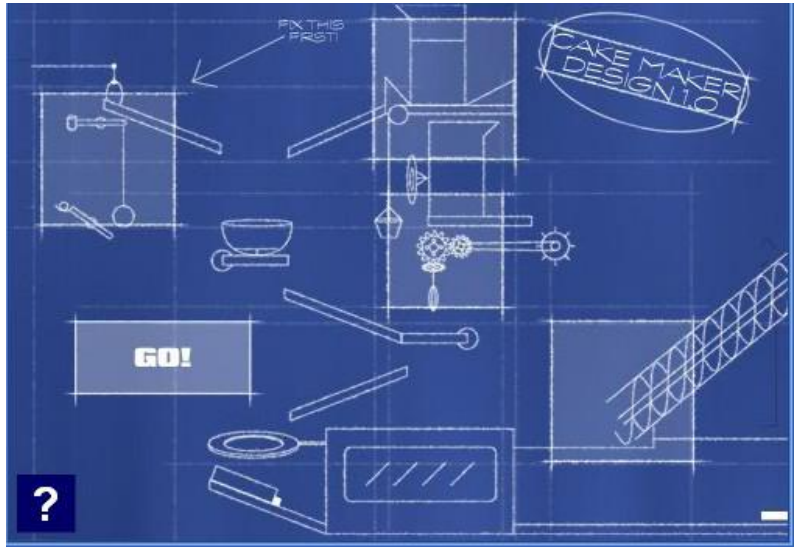


Mechanics Module

- Purpose
  - Educate users about physics behind simple machines through interaction with various puzzles.
- Obstacles
  - Completing the module by the end of the semester.
  - Balancing education and entertainment.

Improvements

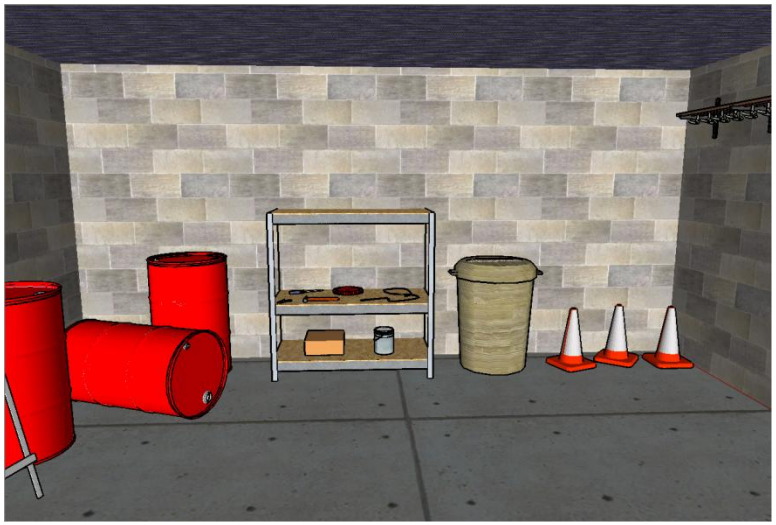
- Feedback from the sponsor showed they did not like the gnome idea.
- The previous module was in its early stages, there was little work lost by creating a new story.
- Expansion of initial module.

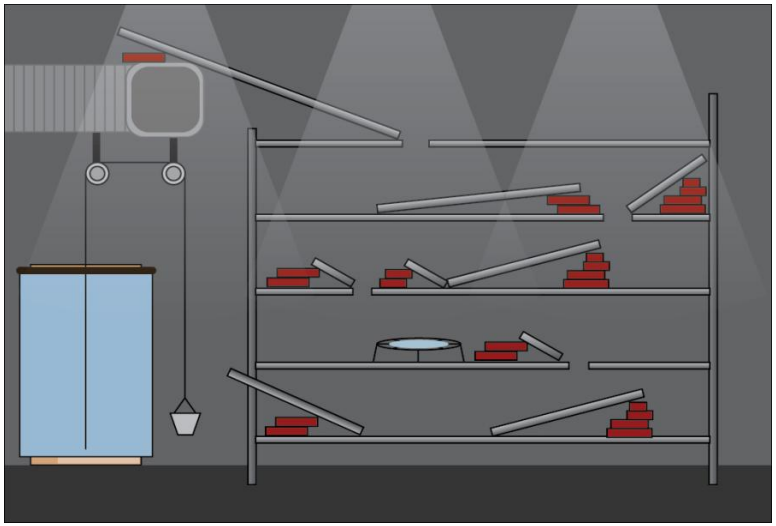


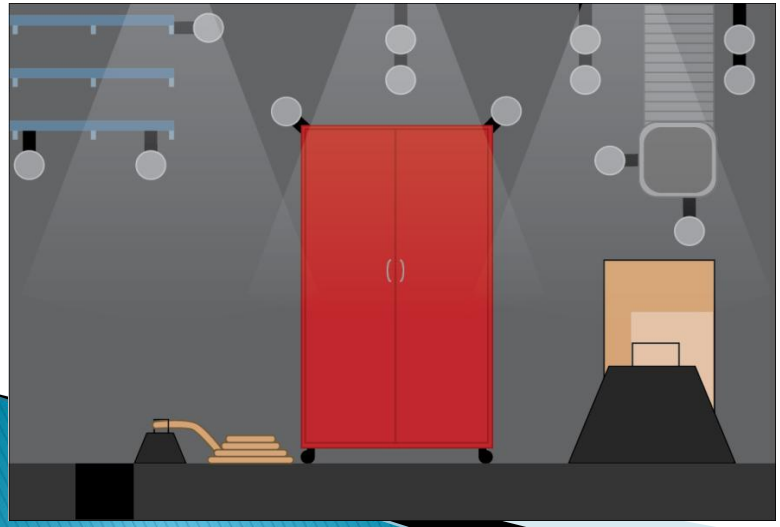
Current Module

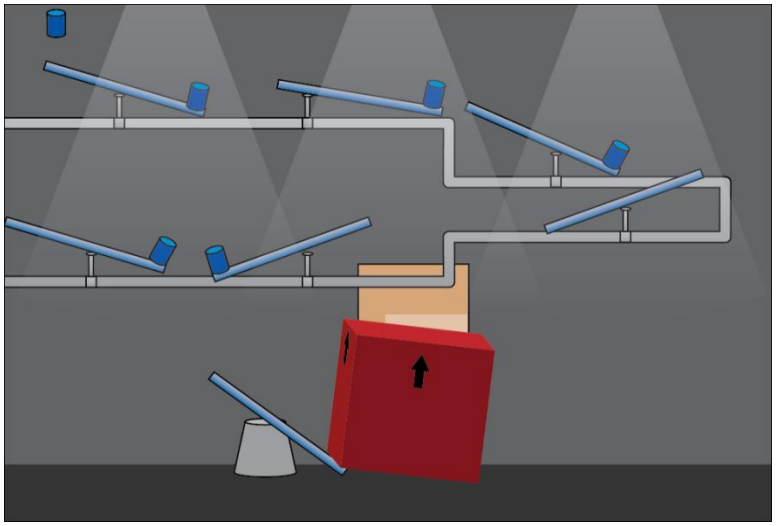
- Point and click adventure in MSI.
- The storyline was created so the user feels more involved and is more mature and realistic.
- User stumbles upon a new exhibit under construction and decides to look around. User gets stuck inside the new exhibit and must escape by solving mechanics based puzzles.

Example Room and Puzzles









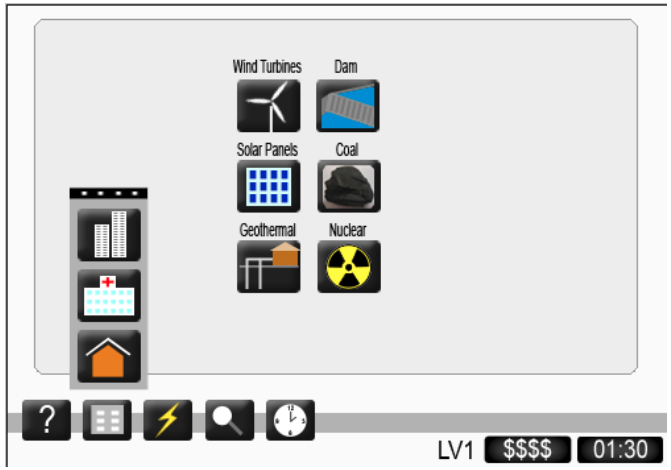
Energy Module

- Purpose
  - The user will experiment with powering buildings using different types of sustainable energy.
  - Cost analysis, benefits and feasibility will be displayed for each type of power.
  - From this information, the user will be asked to provide power for a building using the most efficient energy sources.
- Obstacles
  - Finding credible energy statistics for the module.

Improvements

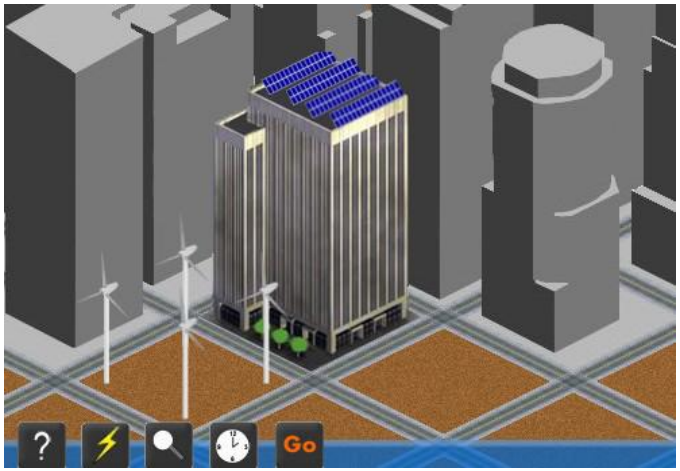
- Redesign of the existing images
- New locations alter what power sources the user should utilize
- Only small scale energy sources are user controlled
- Better researched content

Images



Old Module

New Module



Milestones

- Design Development – Phase 1
  - 2.28.08 – Approval of direction and semester goals
- Design Development – Phase 2
  - 3.27.08 – Approval of progress
- User Testing
  - 4.10.08 – Haines School
- Design Development – Phase 3
  - 4.24.08 – Approval of final development
- Final Submission
  - 5.1.08

Thank you!