**Design**

Overall Game Flow

Museum Floorplan

Character Development

Adobe Illustrator finalized mockups

12 point character movement (see laptop at exhibit)

Storyboards: Intro, Planet Game, Lunar Phase Game, and Constellation Game

Mockups: Intro, Planet Game, Lunar Phase Game, and Constellation Game

**Development**

Isometrics:
- Visual representation of three-dimensional objects in two dimensions.
- Requires a less powerful machine in comparison to true 3-D
- More immersive and interactive than the typical 2-D educational game

Flash MX 2004:
- Allows game to run on both PCs and Macs
- Direct interface for manipulating graphics
- Object Oriented Actionscript 2.0
- Small learning curve
- Native XML support

**Implementation:**

Implemented Isometric 3D Game World

Implemented Beta of Constellation Game

**User Experience**

Solomon Elementary School Testing

Preparation
- Developed process for entering schools and studying students
- Created information packets
- Wrote up consent forms
- Obtained IRB approval for the study
- Obtained parental consent forms

School testing
- 93% of students have a computer at home
- 83% of students play computer games
- Students tested a math game online
- Game is called Bobber’s Farm (seen at right)

Bobber’s Farm helps students identify fractions, odd and even numbers, and prime numbers.

**Management**

Progress over the semester
- Created and finished all IPRO Deliverables
- Implemented a versioning online file repository and standard naming conventions.
- Implemented peer evaluations for student appraisal and self improvement
- Recorded progress through weekly minutes
- Facilitated online communication and progress tracking with personal blogs.
- Designed a new logo for IPRO 329 and began developing marketing materials

**Scholar Gaming Engine**

- Core of Scholars of the Lost Exhibit
- Handles fundamental functionality
- Extendable and Flexible Object Oriented Architecture
- Reusability allows for faster production of future entertainment games

**Scholar Gaming Engine Class Diagram**

**Why T-shirts?**
- Easy to create with new logo
- Unisex appeal
- Everyone feels like part of the IPRO 329 Team