# Edutainment:

Using computer games to facilitate the learning process.

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# Agenda

- Introduction
- CreditSafe & Usability Testing
- New Project Overview
- Basis for Learning
- Game Walkthrough – Phase I
- Proposed Phase II
- Closing

# Purpose

- Educate using entertainment
  - Computer gaming experience

- Engaging experience – fun to play
  - Students learn without realizing it
  - Prof. James Gee, Wisconsin: Age of Mythology inspires reading about mythology

- Build-off of last semester's success
  - Develop new product

# Communication



**Faculty Advisor**

**Project Manager**

Marketing

Development

Usability

Design
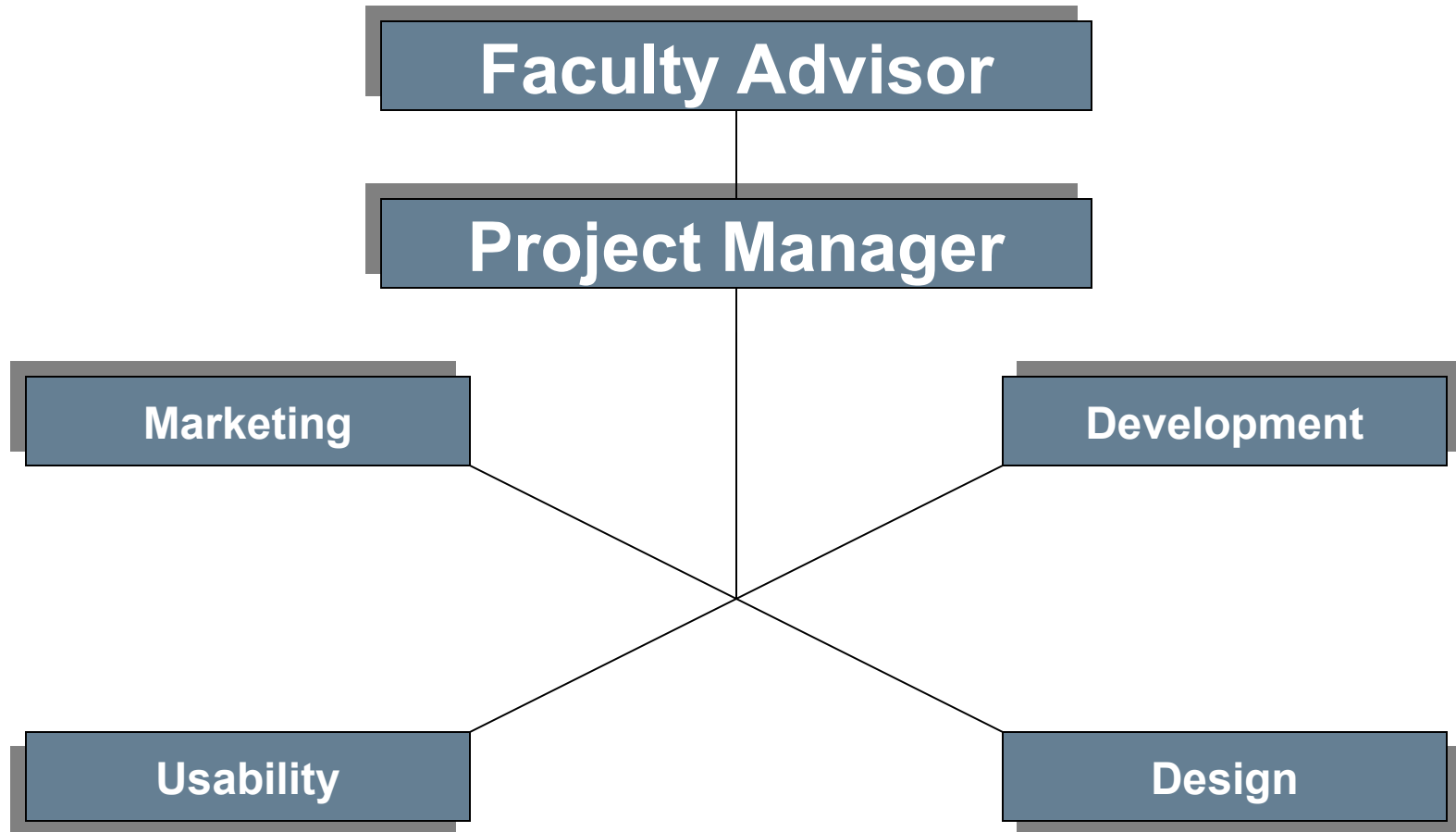
# **Credit**Safe

- Developed for Illinois Secretary of State
  - Part of the KidsInvest SOS Website

- Teaches credit card management skills and prudent credit card use for teenagers and young adults.

- Real-world application

# **Credit**Safe

- Game play
  - Profile
    - Name
    - Income / Jobs
  - Project
    - Shopping at various stores
  - Bank
    - Transfer balances, pay bills

Demo available at poster session

# Usability Team

- Develop a procedure to test **Credit**Safe
  - Documentation to present to Jones Prep
  - Testing in school

- Develop usability tests for CollegePursuit

# Usability Team

- Test to see if students learned from CreditSafe
  - Pre-test, game itself, post test
  - Statistical analysis

- Jones College Prep H.S.
  - Tested approximately 200 students
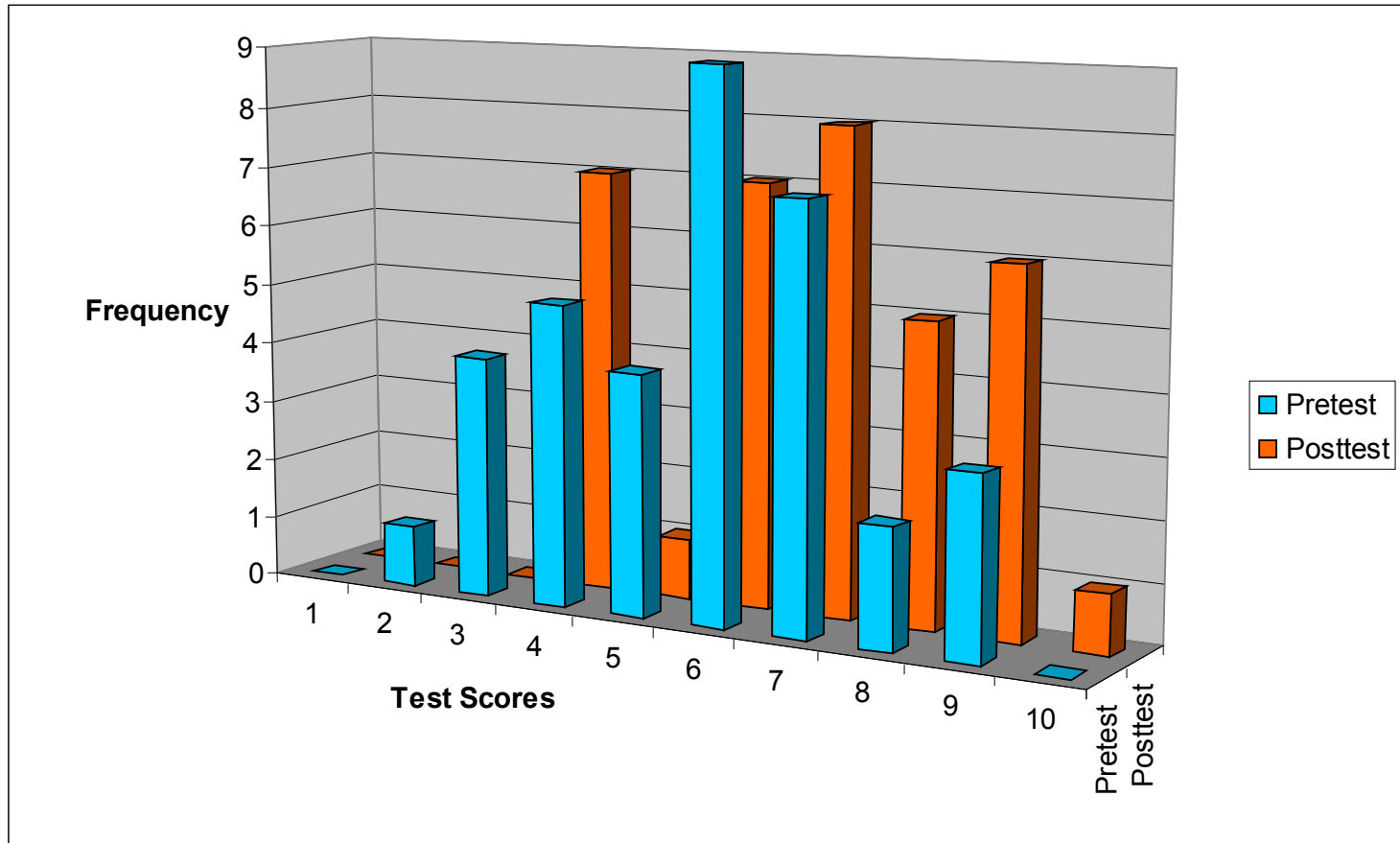  - Worked with teachers and used Jones computer labs during the school day

# What We Learned

- Opportunities
  - Stress testing for large scale deployment
  - Learn how to conduct test, and analyze results

- Successes
  - Kids loved the competitive nature of the game

# What We Learned

# Marketing Team

- **Build on Prior Successes**
  - CreditSafe estimated value of $280,000
  - Edutainment is an up-and-coming phenomenon
  - "Games can be considered one of the finest champions of the new learning paradigm"

    Thoughts on learning in games and designing education computer games by Simon Egenfeldt-Nielsen
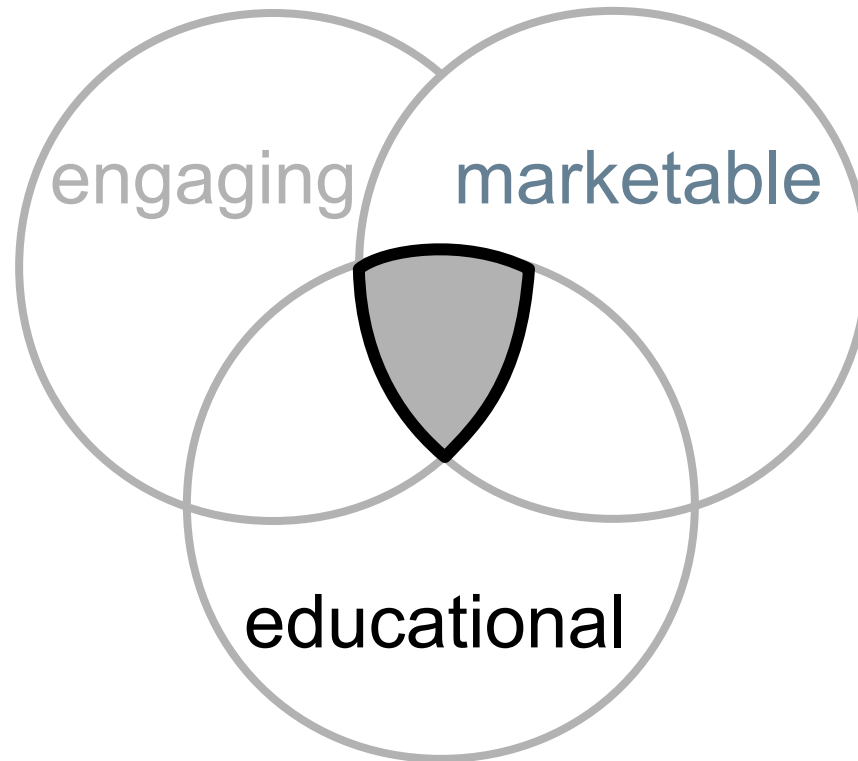
- **Where do people need education?**

- **Financial Sector**
  - Bank accounts, TVM, investments, financial aid

# Game Design Objectives

engaging  **marketable**

educational

# Marketing Team

- Parsing multitude of financial aid information
  - Handbooks, pamphlets, guides

- Help to figure out scoring for the game

- Develop documentation for the game

# CollegePursuit

- Teaches a student (17-21) the process for obtaining financial aid

- Encompass pre-college as well as during college experience

- Phase I: Finding enough money to go to college

# CollegePursuit v. **Credit**Safe

- CreditSafe
  - Secretary of State mandated
  - IBM Websphere (JAVA)
  - Played through the Internet
  - Database driven
  - Static 2-Dimensional environment

- CollegePursuit
  - Individually packaged
  - 3-Dimensional interaction
    - Determined to be more engaging
    - Enables user to become more immersed in game
  - Database driven
  - Cross-platform capability

# Development Team

- **Learn Macromedia Director**
  - How programming language works
  - Cryptography to protect user information
  - Database interaction
  - Developing 3-D models & worlds

# Design Team

- Determine look & feel for game
  - Graphical User Interface
  - Close relationship with Usability Team
  - Consulted usability tests ran

- Determine flow of game
  - Which steps to put where
  - User Interaction

# Development Team

- Development and purpose of databases
  - Layout/Development (~20 hours)
  - Dynamic vs. static
    - Profile information
    - Financial aid information
  - Portability/Upgradeability
- Game play process
  - User's progress tracked throughout game
- 3D environment
  - Used as engaging aspect to the player
  - Creating the neighborhood itself (~80 hours)

# CollegePursuit



Selected Profile,
Selected College Cost,
Financial Aid Acquired during 1st phase

**2nd Phase: College Freshman**
Setting: College campus
Goal: Get thru year with max points

**Administration**
Building

- work at the office

- visit fin-aid office
  - read handbook
  - get fin-aid tips
  - make sure documents are OK
  - fill out forms
  - apply for more aid
  - check overall status

- visit career center (?)
  - find a job on campus

**Classes**
Building

- work at the lab
- go to class
- study

**Recreation Center**
Building

- rest
- party

**Residence Halls**
Building

- rest
- party

**Career Center**
Building

- find a job on campus

**Campus Store**
Building

- work
- buy supplies

**Local Bank**
Building/Site

- manage accounts
- pay credit cards
- pay loans(If any)

**Random Events**
for 2nd Phase

- family financial difficulties
- government requests documents
- identify fraud
- financial gifts
- scholarship offers/awards in the mail (good & scam)
- gifts from family
- **PROJECTS...**

# Conclusion

- Market and find a buyer to fund IPRO for future semesters

- Hire Professional Designers

- Tailor product to buyer's need

- Possible buyers include US Government, banks, financial aid offices

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# Thank You.

Questions are welcome!

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