Edutainment:
Using computer games to facilitate the learning process.
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
CreditSafe

- 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
CreditSafe

- 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 CreditSafe
  - 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

![Bar Chart]

- Frequency
- Test Scores
- Pretest
- Posttest

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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
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. CreditSafe

- 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
College Pursuit: Walkthrough
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

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

Administration Building
- work at the office
- visit financial aid office
  - read handbook
  - get financial 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

Residence Halls Building
- rest
- party

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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