1. Introduction

Our IPRO is called Edutainment because we are developing a computer game that educates and entertains at the same time. The game, CollegePursuit, educates high-school students and their parents about the problems related to financing a college education and their solution.

2. Purpose

The project IPRO 329 is working on this semester, is a financial-aid educational game, ***CollegePursuit***, targeted to high-school seniors and their parents. Work on this project has started last semester and we will be continuing the design, development, testing, and marketing of CollegePursuit.

The specific project objectives our team has determined include:

- Completing phase I of CollegePursuit.
- User-testing completed phase I.
- Producing a user manual for phase I.
- Developing beta-version of phase II.
- User-testing beta-version of phase II.
- Producing a user manual for phase II.
- Producing a product roll-out plan.
- Submitting a grant proposal for CollegePursuit.

The development of the CollegePursuit game package is our primary objective, but we will be only satisfied if we manage to achieve this objective through a collaborative and engaging learning experience. Our efforts to create such an experience for every team member are as important as the project itself.

3. Background

IPRO 329 is working on the design, development and marketing of a financial-aid educational game, targeted to high-school seniors. The need for such a product has been determined through surveys within the IIT student community and confirmed by the IIT Financial Aid department.

As the costs, associated with attending college, are consistently increasing, the need for financial aid resources is also increasing. But many students and parents are unaware of all possible financial resources and the procedures for utilizing them. Our game's primary goal is educate high-school students (and their parents) about the problems related to financing a college education and how to solve them .

The game has been divided into two phases – the first phase focuses on the pre-college experiences related to financial aid and the second phase concentrates on the freshman year experiences. Most of the design and coding for the first phase has been completed during the last semester of our IPRO. This semester, the team will refine and complete the first phase and continue on with the development of the second phase.

4. Methodology

The final product of our collaborative efforts is a software product – a financial-aid educational game. There are a number of approaches to software development, each of which has a set of advantages and disadvantages associated with it. For our project, we have chosen an approach that we call the ***Iterative Prototyping*** process model. This model is based on the general *Prototyping Process Model*.

When using the *Prototyping Model*, the developers build a simplified version of the proposed system and presents it to potential users for consideration as part of the development process. The users in turn provide feedback to the designers and developers, who go back to refine the system to incorporate the additional information.

The process consists of the following looping steps:

- **Requirements Definition/Collection.** The information collected is usually limited to a subset of the complete system requirements.
- **Design.** Once the initial layer of requirements information is collected, or new information is gathered, it is rapidly integrated into a new or existing design so that it may be folded into the prototype.
- **Prototype Creation/Modification.** The information from the design is rapidly rolled into a prototype. This may mean the creation/modification of paper information, new coding, or modifications to existing coding.
- **User Testing.** The prototype is presented to possible users for review. Comments and suggestions are collected from the users and reported back to the team.
- **Prototype Refinement.** Information collected from the customer is digested and the prototype is refined. The developer revises the prototype to make it more effective and efficient.
- **System Implementation.** In the traditional model, the system is rewritten once requirements are understood. In the *Iterative Prototyping* process, the results of the tests are used to guide the changes to the system. As some parts or phases of the software are implemented, other parts and prototyped and tested.

The process model we use has proven successful to the needs of similar past projects of ours. There are several benefits of this approach:

- Creation of the major user interfaces without any substantive coding in the background gives the users a “feel” for what the system will look like and uses their feedback to refine the system at a very early stage.

The iterative nature of development allows for parallel progress of several tasks – different system features are being designed, tested and implemented at the same time.

5. Results

The combined outcome of the above results will be a beta version of an entertaining, marketable and educational financial-aid game, thoroughly user-tested, complete with a user manual, marketing materials and a roll-out plan. Along with that, if the grant proposal is approved, we will have a well-funded project to improve, complete and publish CollegePursuit.

In addition to the great social value that CollegePursuit has a free educational tool to those in need of financial aid, it also bring recognition and popularity to IIT as every copy that ships will bear IIT's logo on it. In addition, it has a really good chance of bringing IIT $65,000. This is FREE money and FREE advertisement for IIT in one package.

Our IPRO has also provided for another IPRO this semester. Based on our meetings, presentations and website, they created an 'exemplary-IPRO' documentary, which also won two IPRO day awards (in contrast to our IPRO which did not win).

As a conclusion, we did achieve all our project AND IPRO learning objectives creating a great product in a great collaborate team environment. This is truly an exemplary IPRO.

6. Next Steps

After the development and final user-testing of CollegePursuit are completed, approximately 1000 CDs will be recorded and distributed to various financial aid education agencies and organizations in the United States. Additionally, a website for game downloads and updates will be developed and launched. During the Summer of 2005, we will showcase and market the game at two important conferences - NACAC (National Association for College Admission Counseling) and NASFAA (National Association of Student Financial Aid Administrators).

7. References

FastWeb - http://www.fastweb.com
FastWeb is the largest and most popular college- and scholarship- search service. If you need money for college (who doesn't ?), do a free FastWeb scholarship search. When new awards are added that match your profile, FastWeb emails them to you automatically.

FinAid - http://www.finaid.org

FinAid claims to be the 'SmartStudent Guide to Financial Aid' and the most comprehensive free resource for objective and unbiased information about student financial aid. If you browse the website, you will see that they are not far off!

Federal Student Aid - http://studentaid.ed.gov
FSA is a very large web portal for federal aid information, and is maintained by the US Government. It has ample information on many financial aid topics and links to other important financial aid sites.

IIT UTEC Lab - http://www.iit.edu/~utec/
To learn more about the Usability Testing and Evaluation Center that we have been using to conduct our usability tests, this is the website to visit!

CreditSafe Game - http://sos.iit.edu
CreditSafe is a credit card educational game that we completed last semester for the Illinois Secretary of State Office. It has been very well accepted since and will be used in high-schools nation-wide.

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