1. Objectives

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.

2. 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.

3. 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.

4. Expected Results

The results we expect to achieve through this semester are directly derived from our project objectives:

- Final-version of phase I of CollegePursuit.
- Beta-version of phase II of CollegePursuit.
- User-testing report for phase I.
- User-testing report for phase II.
- User manual for phase I and phase II.
- Grant proposal for CollegePursuit (submitted).

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.

5. Budget

Included below is the itemized budget for the project:

Design Team	Expenses
Hired ID designer @ $15/hr	
60hrs for user interface	900
35hrs for building models	525
5hrs for logo design	75
40hrs project item models	600
Subtotal	**2100**

Marketing Team	Expenses
3 copies of Final Report @ $20	60
25 brochures @ $2	50
Subtotal	**110**

Development Team	Expenses
Hired Lingo programmers @10/hr	
Programmer 1 - 50hrs	500
Programmer 2 - 50hrs	500
Subtotal	**1000**

Usability Team	Expenses
Testing users @ $20/person	
3 tests x 6 people	360
2 user manual copies @ $12	25
Subtotal	**385**

IPRO Team	Expenses

STC seminar	200	
Final poster	100	
Subtotal	**300**	

GRAND TOTAL   3895

The success of our project is strongly dependent on the availability of these resources. **Important:** As a part of our project, we will submit a grant proposal. If this proposal is approved, we will be more than able to reimburse the IPRO office for the funds specified here.

6. Project Deliverables and Milestones

Project Deliverable	Due Date		Teams
Grant Proposal	draft: final:	Mar 12 – Week 8 Apr 02 – Week 11	Marketing
User Manual	draft: final:	Feb 27 – Week 6 Apr 16 – Week 13	User Testing, Marketing
Product Rollout Plan	draft: final:	Mar 05 – Week 7 Apr 09 – Week 12	Marketing
Completed Phase I of Game		Feb 13 – Week 4	Design, Development
User Testing Report on Phase I		Feb 27 – Week 6	User Testing
Final Look & Feel		Mar 12 – Week 8	Design
Beta Phase II of Game		Mar 26 – Week 10	Design, Development
User Testing Report on Phase II		Apr 02 – Week 11	User Testing
Alpha Phase II of Game		Apr 23 – Week 14	Design, Development
Development Documentation		Apr 23 – Week 14	Development

IPRO Deliverable	Due Date		Teams
Project Plan & Budget		Jan 30 – Week 2	All
Mid-term Report		Mar 05 – Week 7	All
Website	draft: final:	Feb 27 – Week 6 Apr 02 – Week 11	Design + help
Presentation	draft: final:	Mar 26 – Week 10 Apr 23 – Week 14	Design + help
Poster	draft: final:	Apr 16 – Week 13 Apr 23 – Week 14	Design
Abstract		Apr 23 – Week 14	All
Final Report		May 07 – Week 16	All

7. Weekly Assignments

Week	Tasks and **Deliverables**
Jan 23 – Week 1	Meet with team and review last semester ➢ Begin project plan
Jan 30 – Week 2	Programming ➢ Phase I – determine assignments and development scope ➢ Phase I – coding Design ➢ Look & Feel – research resource needs ➢ Determine assignments and additional tasks ➢ Phase II – begin scope and requirements ➢ Website – determine assignments Marketing ➢ Grant proposal – determine assignments ➢ Product Rollout Plan – determine product items (brochure, product packaging, target market for distribution, etc.) and make assignments (with and without Grant). Also, review legal issue with software and distribution (ongoing). Usability ➢ User Manual – determine assignments ➢ Determine test methodology and assignments Other ➢ Finalize project plan and budget (due Jan 30)
Feb 6 – Week 3	Programming ➢ Phase I – determine use of outside sources ➢ Phase I – coding Design ➢ Look & Feel – research resources ➢ Phase II – continue scope and requirements ➢ Website – begin design Marketing ➢ Grant Proposal – continue work ➢ Product Rollout Plan – continue working Usability ➢ User Manual – determine format and begin work on Phase I (help from Marketing Group if needed through the project) ➢ Phase I – prepare testing materials for internal and external testing
Feb 13 - Week 4	Programming ➢ Phase I – determine use of outside sources ➢ **Phase I – present for review and prepare for test**

	Design
	   ➢ Look & Feel – secure resources
	   ➢ **Phase II – continue scope and requirements, present draft**
	   ➢ Website – continue design
	
	Marketing
	   ➢ Grant Proposal – continue work
	   ➢ Product Rollout Plan – continue working
	
	Usability
	   ➢ User Manual – continue work on Phase I
	   ➢ Phase I – prepare testing materials for internal and external testing

Feb 20 – Week 5	Programming
	   ➢ Phase I – make changes from Internal Test
	   ➢ Phase II – review resources for development
	
	Design
	   ➢ Look & Feel – begin designing
	   ➢ **Phase II – finalize scope and requirements, present screens**
	   ➢ Website – continue design
	
	Marketing
	   ➢ **Grant Proposal – present rough draft for review**
	   ➢ Product Rollout Plan – continue working
	
	Usability
	   ➢ Phase I – conduct Internal Test and report back
	   ➢ Phase I – setup external user testers
	
	Other
	   ➢ User Manual – continue work on Phase I
	   ➢ Phase I Internal Testing – all teams test screens and functionality

Feb 27 – Week 6	Programming
	   ➢ Phase I – make changes from Internal Test
	   ➢ Phase II – begin coding & hire resources if necessary
	   ➢ Phase I – begin development documentation
	
	Design
	   ➢ Look & Feel – continue designing
	   ➢ Phase II – fine-tune screens and requirements
	   ➢ **Website – present draft design for review**
	
	Marketing
	   ➢ Grant Proposal – continue work
	   ➢ Product Rollout Plan – continue working
	
	Usability
	   ➢ **User Manual – present rough draft of Phase I**
	   ➢ Phase I – external user test and report results
	   ➢ Phase I – determine changes to make and prepare report

Mar 5 – Week 7	Programming
	  ➢ Phase I – make changes from External Test
	  ➢ Phase II – continue coding
	  ➢ Phase I – continue development documentation
	
	Design
	  ➢ Look & Feel – continue designing
	  ➢ Website – continue design
	
	Marketing
	  ➢ Grant Proposal – continue work
	  ➢ **Product Rollout Plan – present rough draft**
	
	Usability
	  ➢ User Manual – review draft and beginning Phase II
	  ➢ **Phase I – present results from user test**
	
	Other
	  ➢ Midterm Report to IPRO office (due Mar 9)

Mar 12 – Week 8	Programming
	  ➢ Phase II – continue coding
	  ➢ **Phase I – finalize development and documentation, present**
	
	Design
	  ➢ **Look & Feel – present design**
	  ➢ Website – continue design
	
	Marketing
	  ➢ **Grant Proposal – present final draft**
	  ➢ Product Rollout Plan – continue working
	
	Usability
	  ➢ User Manual – continue work
	  ➢ Review methodology for Phase II

Mar 19 – Week 9 break (no meeting)	Programming
	  ➢ Phase II – continue coding
	
	Design
	  ➢ Look & Feel – help with coding design on pages
	  ➢ Website – continue design
	  ➢ Presentation – create draft
	
	Marketing
	  ➢ Grant Proposal – review final draft
	  ➢ Product Rollout Plan – finalize rollout plan
	  ➢ Marketing materials – begin work on brochure, etc.
	
	Usability
	  ➢ User Manual – continue work
	  ➢ Phase II – create testing materials for internal test

Mar 26 – Week 10	Programming
	➢ **Phase II – finalize coding of beta version and present**
	➢ Phase II – begin development documentation
	Design
	➢ Look & Feel – continue coding design on pages
	➢ Website – continue design and final draft
	➢ **Presentation – continue draft and present**
	➢ Poster – determine assignments and design
	Marketing
	➢ Grant Proposal – final revisions and final copy
	➢ Marketing Materials – continue work
	➢ Determine product packaging and legal issues with software and distribution
	Usability
	➢ User Manual – continue work
	➢ Phase II – coordinate internal testing and report
	➢ Phase II – create materials for external test
	Other
	➢ Phase II Internal Testing – all teams test screens and functionality
Apr 2 – Week 11	Programming
	➢ Phase II – make changes from internal testing
	➢ Phase II – continue development documentation
	Design
	➢ Look & Feel – continue coding design on pages
	➢ **Website – review and present final draft**
	➢ Presentation – update and practice
	➢ Poster – continue work
	Marketing
	➢ **Grant Proposal – present and send final copy**
	➢ Market Materials – continue work
	Usability
	➢ User Manual – final draft
	➢ **Phase II – Determine changes and report results**
	➢ Phase II – setup external user testers
Apr 9 – Week 12	Programming
	➢ Phase II – continue development documentation
	Design
	➢ Look & Feel – continue coding design on pages
	➢ Website – review final draft
	➢ **Presentation – continue update and practice**
	➢ Poster – continue work
	➢ Abstract – create draft
	Marketing

	➢ **Marketing materials – present drafts for review** Usability ➢ User Manual – review final draft and make modification ➢ **Phase II – external user test and present report**
Apr 16 – Week 13	Programming ➢ Phase II – make final changes ➢ Phase II – finalize development documentation Design ➢ Look & Feel – continue coding design on pages ➢ Website – review final draft ➢ Presentation – finalize, practice ➢ **Poster – finalize draft for review and present** ➢ Abstract – review draft Marketing ➢ Marketing materials – review draft Usability ➢ **User Manual – present final draft and make modifications** ➢ Phase II – determine changes from test and give to development Other ➢ Phase II – all teams help test final changes
Apr 23 – Week 14	Programming ➢ **Final testing and 'tuning', present game and documentation** Design ➢ Look & Feel – finalize coding design on pages ➢ Website – finalize ➢ Presentation – final practice ➢ Poster – revisions and finalize ➢ Abstract - finalize Marketing ➢ Marketing materials and Product Packaging - Finalize Usability ➢ User Manual – Finalize Other ➢ Determine Product GO/No GO!
Apr 30 - Week 15	➢ Finalize Everything ➢ Find equipment for presentation and exhibit ➢ Submit Abstract and Poster (Apr 26) ➢ Submit Website & Presentation (Apr 28) ➢ IPRO Day: Apr 30
May 7 – Week 16	Turn in Notebook, Final Report, and CDROM