Background:

Imagine a workplace where 80% of the employees leave every 16 weeks, and are replaced by people who have no idea what the project is, have no access to old documents from the project, and are just starting to learn how to do their job. This is the plight of the continuing IPRO.

IPRO 338's Knowledge Management System (iKNOW) solves these problems by:

• Allowing students to store and retrieve key documents from all previous semesters;

• Providing self-training applications for key IPRO skills such as project management and presentations;

• Recording the experts used for each project and enabling students to locate them by their expertise.

iKNOW was developed by the IPRO 338 teams of five prior semesters, with the first working versions produced in the Fall 2004 semester. Our team began work this semester to improve the stable version of the system passed on to us by the Fall 2004 IPRO 338 team.

Spring 2005:

The key goals of this semester's iKNOW team include expanding the **usability** and **functionality** of the system.

Increasing the **usability** of the system was approached by several means. First, user manuals for both the users and administrators of iKNOW were developed from the current system version. Second, a set of tutorial videos were produced in order to provide a visual tour through using iKNOW. Lastly, a usability test was conducted that identified areas of the system that needed improvement in order to increase the system's user friendliness.

Expanding the **functionality** of the system focused on two paths. First, a webservice was created based on the SOAP protocol to allow other applications to access the system through a common interface. The second area of functionality improvement includes those areas of the system whose functionality was not acceptable for the requirements of the system. The implementation of those changes identified by the usability test and deemed within the scope and context of the current semester fell within this context.

We leave a more easily used and better functioning system to the IPRO project teams of coming semesters.

Future:

Though the IPRO 338 team accomplished a lot, some of the ideas we discovered were not implemented, and with the assistance of our system, will be passed to the next 338 team as suggestions for improvement. These are:

- Functional test v1.4

- Expand the SOAP interface

- Update the user manual and tutorial for iKNOW v1.4

- Combine functionality of PRS and groupware into iKNOW

- Add experts from the course listings database

- Capture additional process knowledge modules

- Embed media player for video playback within iKNOW

- Rollout system to all IPRO teams

IPRO 338 Spring 2005

OBJECTIVES:

Complete iKNOW V1.3 programming

Test iKNOW system V1.3

Begin iKNOW V1.4 programming

Develop a SOAP interface to knowledge base

Develop a user manual for V1.3

Develop a tutorial for V1.3

Build an expert database

Build a process knowledge database

Conduct usability testing

Liaison with IPRO teams

RESULTS:

Completed iKNOW V1.3

Functional tested V1.3

Began programming V1.4

Developed SOAP interface to knowledge base

Identified needed process knowledge

Began creating process knowledge modules

Completed user manual V1.3

Completed tutorial V1.3

Began developing expert database

Conducted usability testing

Liaisoned with 10 IPRO teams

IPRO 338 Team – Spring 2005

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KNOWLEDGE

MANAGEMENT

SYSTEM

IPRO 338
Spring 2005