IPRO 309
Web Portal that Creates Awareness about Engineering Careers for High School Students, Teachers and Counselors

Presented By:
Alex Ostapczuk
Ryan Ilagan
Victor Lomeli
Overview

- History
- Objective
- Goals
- Team Organization
- Portal Design

- Data Collection
- Future Steps
- IPRO Team experience
- Issues
- Acknowledgements
History

- The project started in the spring semester of 2001
- Needs surveys conducted between high school counselors and students
- Web Portal description created
- Web Portal design implemented and populated with data
Objective

- To develop a completely functional web portal that inspires High School students to consider careers in engineering
- Populate the Web Portal with data
- Maintain the Web Portal
Goals

- Implementation of design
- Population with data (i.e. links, synopses, surveys, etc…)
- Interview professors, professionals, and students
Team Organization

- Divided into two sub teams
- Encountered problems with scheduling
- Tried to assign equal amount of tasks
Research Topics

- Content vs. Links
- Engineering Majors Available
- Link Research
- Interviews
- Testing of the Site
The Link Argument

- Portal: Implies collection of Links

- Providing Content will be synonymous to “reinventing the wheel”

- Time and Space is too consuming
The Content Argument

- We can not stimulate a students interest
- Our site would not have any autonomy
- Content gives the user another reason to return to our site
Engineering Majors

- A student can not be interested in something that he is unaware of.
- Aimed to answer some basic questions.
- Provide all other information that is relevant to particular field.
IEC Educational Services

Engineering Majors Listing

- Aerospace Engineering
- Architectural Engineering
- Biological Engineering
- Chemical Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Mechanical Engineering
- Nuclear Engineering

Site created and maintained by IPRO 309 - Illinois Institute of Technology
"Diversity" is the key word when it comes to Mechanical Engineering. There are many fields in which Mechanical engineering plays a role: automated manufacturing, environmental control, transportation, biomedical fields, computer fields, fossil fuel and nuclear power... the list goes on and on. Mechanical Engineers are concerned with imagining and implementing programs and devices that improve our world and our movement in it. A Mechanical Engineering major's designing endeavors are diverse, from tiny measuring instruments to huge aircraft carriers or power plants. They also are involved with testing, evaluating, distributing, and marketing the devices they and their colleagues create. If the all of these challenges appeal to you, Mechanical Engineering might be a major to consider. As with other engineering programs, your course of study may include one or more semesters of a co-operative education program, in which you will be employed full-time with an appropriate company. A co-operative is a great way to put your knowledge to use, and often times your co-op job leads to post-graduation employment.
Engineering Majors Listing > Mechanical Engineering

High School Preparation

Science and math courses will be most helpful if you're looking towards a Mechanical Engineering major. Try to take higher-level courses if they're offered, like calculus and any AP classes. And no matter how much you get teased, go to science fairs and other scientific competitions. Be that geek whose entries always win. Nothing prepares you for a Mechanical Engineering major better than taking the things you learn in your chemistry and physics classes and putting them to practical use.
Link Research

- Introduction of the “link bucket”
- Filtration process
- Categorization of select links
Interviews

- Provides more content
- Gives the site a human touch
- Did not want this to be a deterrent
- Edited the interviews into short segments
Testing of the Site

- Team tested

- Creation of surveys to judge the site and provide feedback on improvements

- The creation of the on-line survey
Future Steps

- More Interviews
- More links
- More engineering majors covered
- Portal Testing
- Surveys
Tasks and Responsibilities

- Overall creation of the Web Portal
  - Graphical Design
  - Flow of contents
  - Database Design

- Interfacing with Research Team
  - Gathering + organization of contents
  - Providing useful tools: Online Survey
Vastly Improved Web Portal

Old Web Portal
- Static Information
- Use of pure HTML
- Sparse Information
- Few Links
- Limited Future upgradeability

New Web Portal
- ASP versus pure HTML
Dynamic Information

- **Database Driven Content**
- **Separation of Front End and Back End**
  - Interface can be easily changed
  - Information can be added and deleted easily
- **Future Enchantments**
  - Administration Pages
Interactive Site

- Student Network
- Online Survey
- Future Enhancements
  - Games
  - Quizzes
  - Student Profiles
  - Secure Student Network
Technology

Composition
- ASP 3.0
- Microsoft Access 2000

Tools
- Macromedia Ultradev 4.0
- Macromedia Fireworks 4
- Adobe Photoshop 6
IPRO Team Experience

- Work as a team
- Integration of different ideas, experiences, and views
- Students apply what they learned in the classroom
- Work closely with Professionals
The team

- Advisor: Dr. Voland
- Web Team: Ryan Ilagan, Victor Lomeli, Mulyadi Oey, Aditya Mardia
- Research Team: Allan Howard, Gordan Raic, Vaibhav (Manu) Sawhney, Fan Ping, Alex Ostapczuk
- Sponsor: Mike Janowiak
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