



ResearchWeb Final Presentation

IPRO 321

December 4, 2009

Presenters:

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Undergraduate Research

- **Exposes students to research process**
- **Gives students a valuable experience**
- **Brings together the IIT Community**



Problems

- **Lack of understanding of research process**
- **Lack of promotion of research opportunities**
- **No place for student-initiated research**
- **No central, online place for undergraduates to display research**

Prior Work

- Undergraduate (UG) research project
- Software specifications
- Rapidly developed prototype

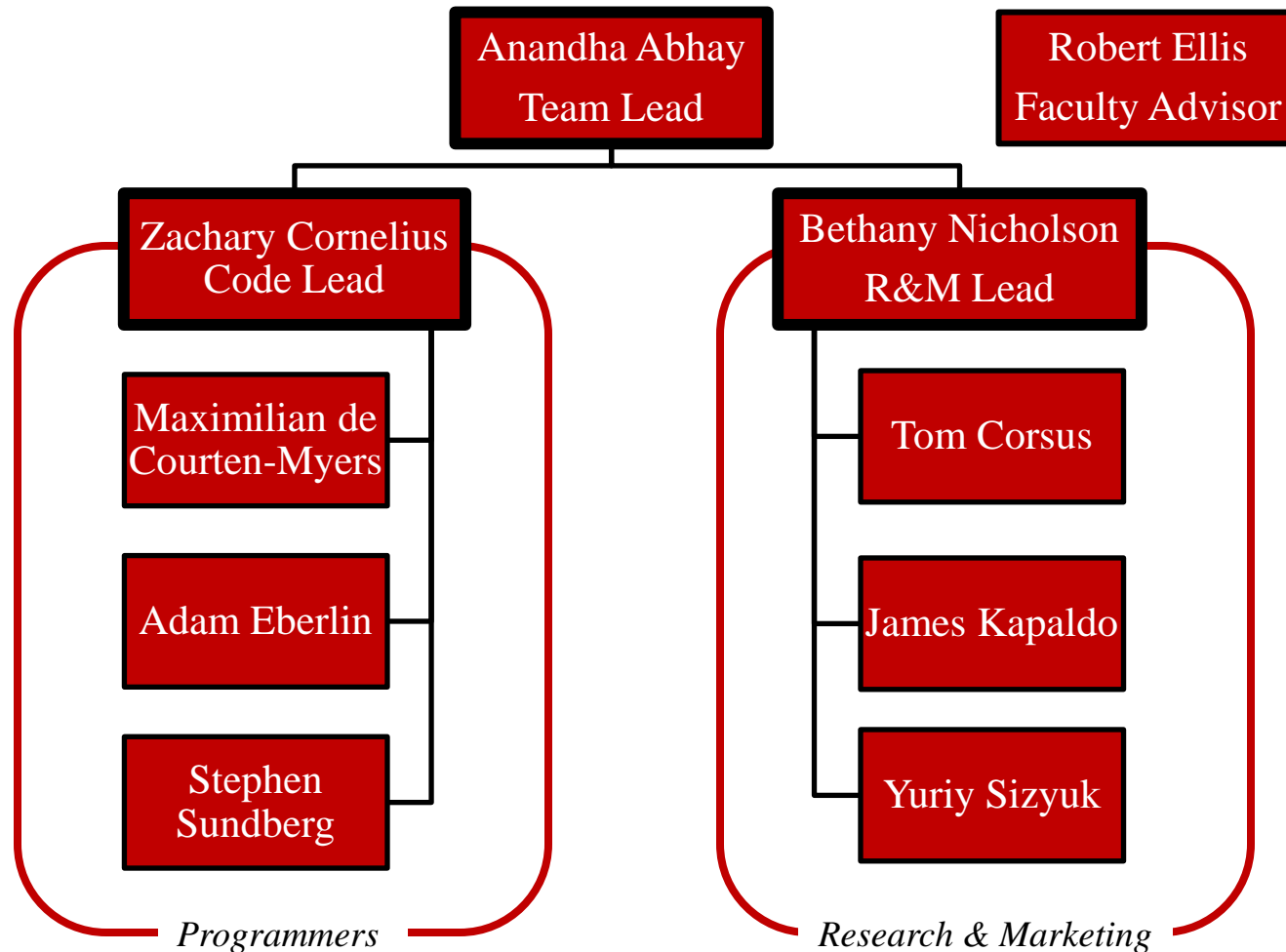




Goals

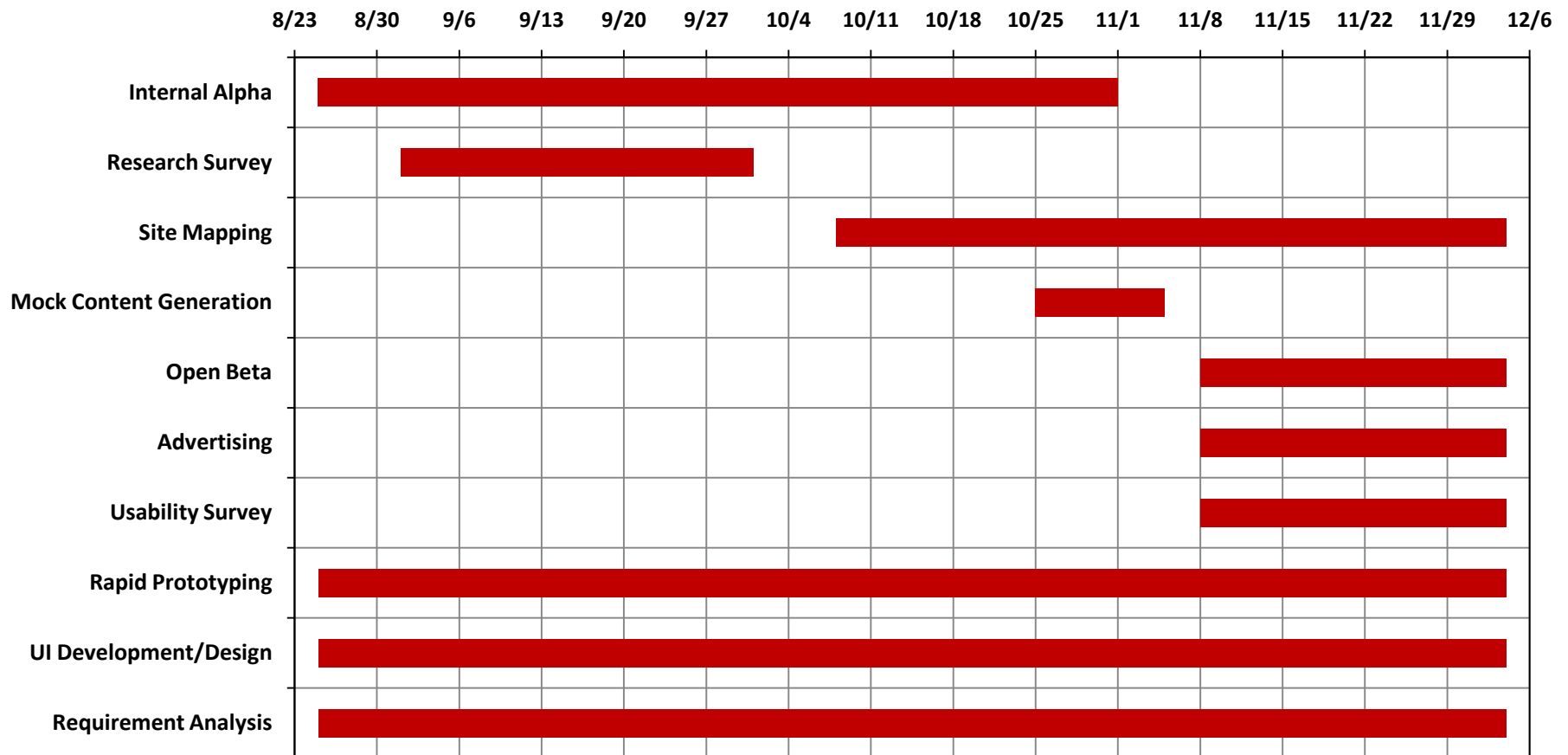
- **Improve and expand UG research at IIT**
- **Create a website that aids the research process**
- **Design all site interfaces and features**
- **Hold internal testing (alpha)**
- **Hold open testing (beta)**
- **Launch advertising campaign**

Team Organization



Team Planning

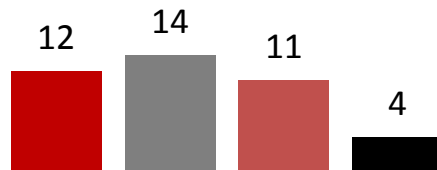
ResearchWeb Tasks



User Survey

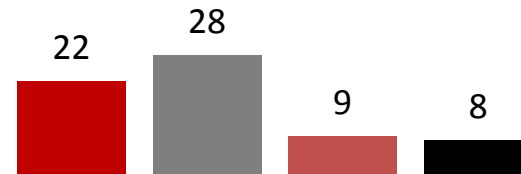
Hindrances to UG Research

- Student's Lack of Experience
- Time Commitment
- Knowledge of Opportunities
- Availability of Resources



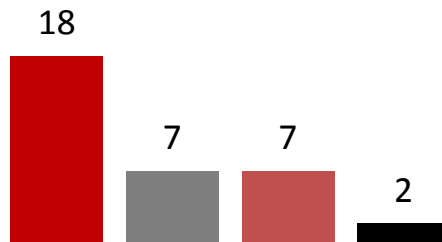
Preferred Methods of Communication

- Face-to-Face Meetings
- Email
- Phone
- Instant Messaging/Texting



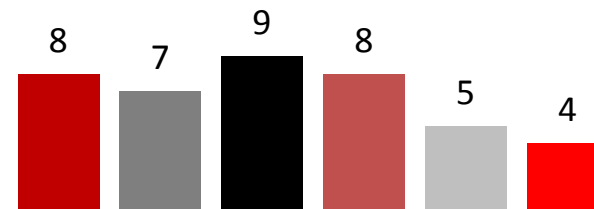
Are Privacy Settings Required?

- Yes
- No
- Should be Customizable
- Wouldn't Post Sensitive Data



Enticements to Use ResearchWeb

- Common Storage
- Streamlined Communication
- Research Community
- Simple Interface
- Opportunity Listings
- Place to Learn about Research



Current Resources

The collage displays the following resources:

- ResearchChannel:** A website titled "Giving voice and visibility to discovery that is changing the world". It features a network diagram and text about its mission to showcase research and promote interdisciplinary collaboration.
- Mendeley:** A screenshot of the Mendeley Desktop interface, showing the "How it Works" section. It explains how to create a bibliography database by importing research papers from various sources like EndNote, RefWorks, or PDF files.
- labmeeting:** A website titled "make science easier." designed for organizing research papers and meetings. It includes sections for "Organize your PDFs", "Discover New Papers", and "Manage Your Life".
- Google Docs:** A screenshot of the Google Docs homepage, showing options to create documents, spreadsheets, and presentations online.
- IIT Undergraduate Research Project (Student Page):** A screenshot of the student portal on the IIT website. It includes a navigation menu with links like "GETTING STARTED", "LATEST HEADLINES", and "MOST VISITED". The main content area lists various research opportunities and projects.
- IIT Undergraduate Research Project (Project List):** A screenshot of a table listing research projects. The table has columns for "Project Title", "Apply/Edit", and "View".

Project Title	Apply/Edit	View
A virtual keypad for hand rehabilitation after stroke	Apply/Edit	PDF
An Investigation of the Utility of Relational Databases in the Finite Element Method	Not Eligible	PDF
Analyzing User Comments on Video Web Sites for Useful Information	Not Eligible	PDF
ANTIMICROBIAL PEPTIDES AND THEIR SYNTHETIC ANALOGS: TOWARDS SUPER-ANTIBIOTIC DRUGS	Apply/Edit	PDF
Design of "health cells" for transplantation procedures	Apply/Edit	PDF
Development of a diffusion tensor MRI template of the adult human brain	Not Eligible	PDF
Environmental Sustainability in		

Software



Ruby



Ruby on Rails



Ubuntu



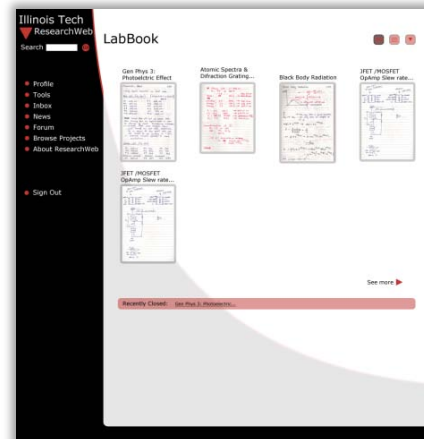
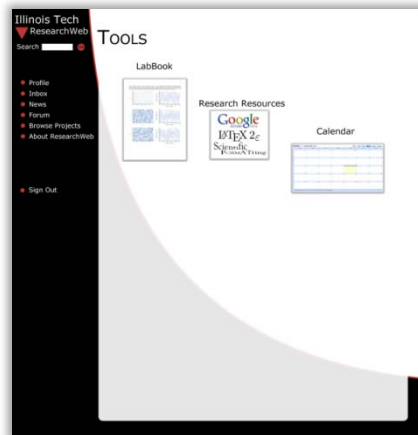
Server

Feature	Original Server	Temporary Server	Current Server	Virtual Private Server
Monthly Cost	Free	Free	Free	\$40.00
Student Administrative Access	✓	✓	*	✓
Secure Location		✓	✓	✓
Reliable Network Connection			✓	✓
Professional Maintenance			✓	✓
Guaranteed Up-time (5 9's)				✓

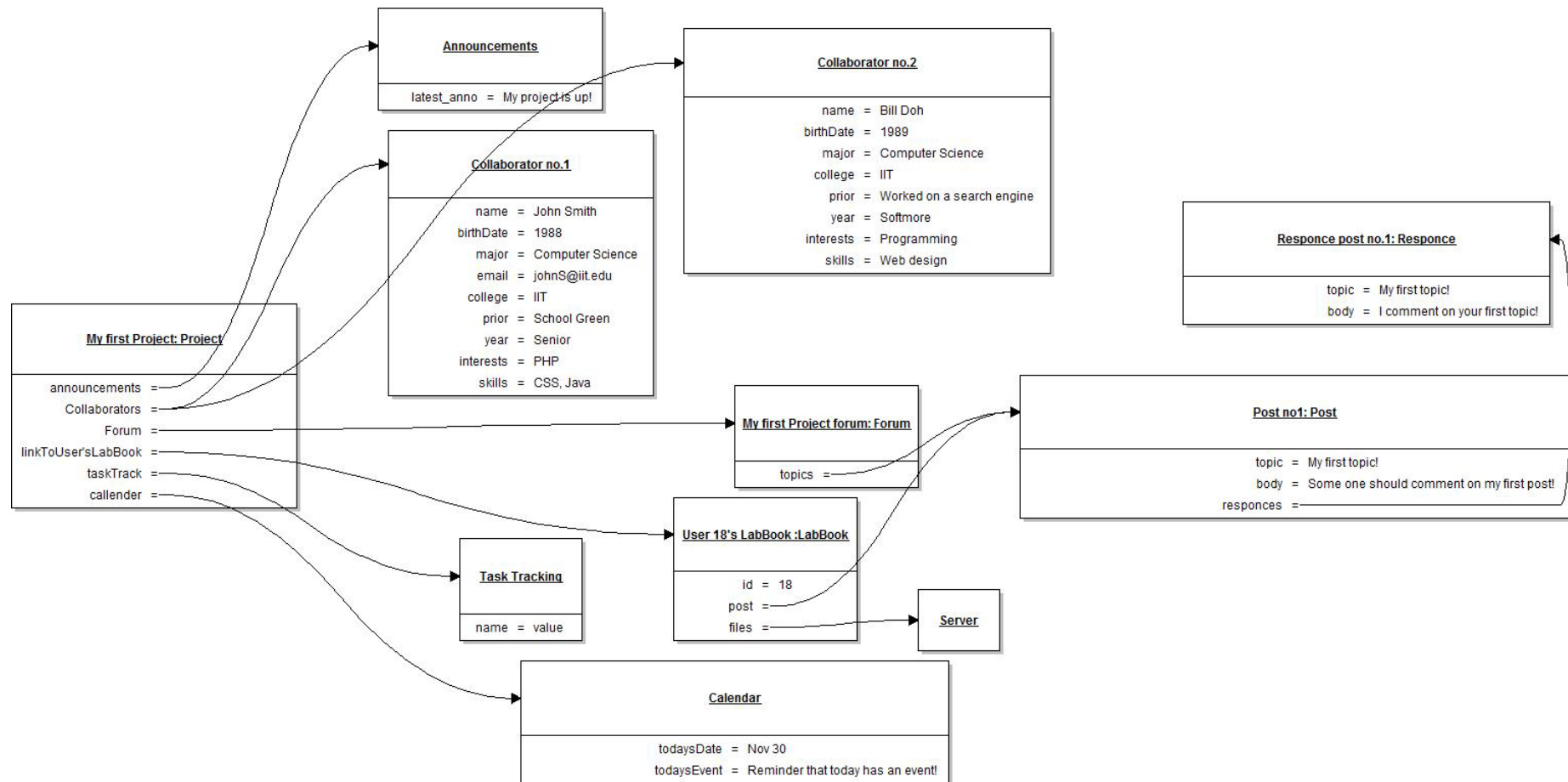
*** Students have limited access**

Website Design: Front-End

- User-centered design
- Bulletin board style



Requirement Specification





Ethical Issues

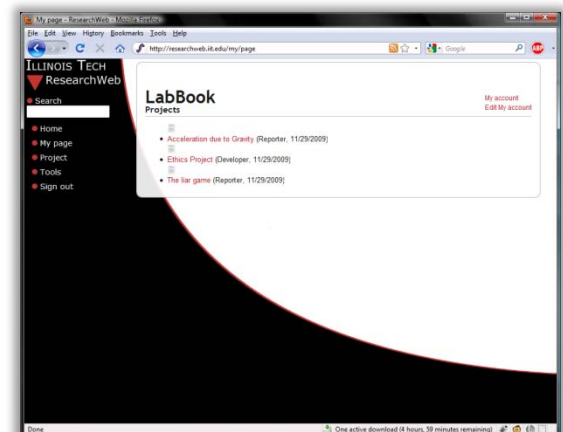
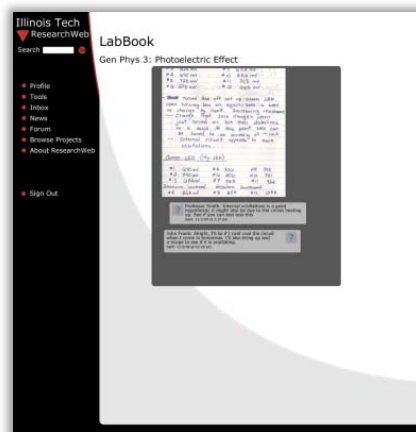
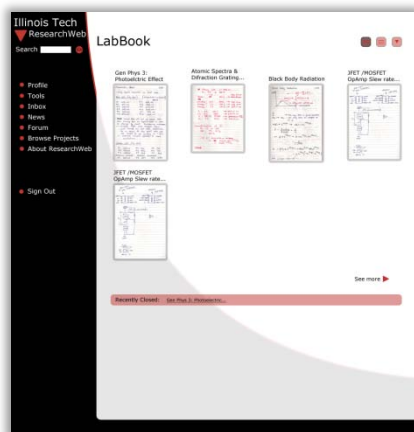
- **GNU general public license version 2**
- **Privacy protection**
- **Content ownership and rights**
- **Copyright**
- **Non-disclosure agreement**



Site Features

Projects & Lab Book

- Central place for data storage
- Private discussion space for collaborators



Social Networking

- Online research community



ILLINOIS TECH
ResearchWeb

Search

- Profile
- Tools
- Inbox
- News
- Forum
- Browse Projects
- About ResearchWeb
- Sign Out

James Kapaldo

Information:

Born: March 1989
College: Illinois Tech
Current Position: Student
Major: Physics
Year: Junior
E-mail: jkapaldo@iit.edu
Instant Message: swimj89 (AIM)

Current Projects and Activities:

Currently working on the development of ResearchWeb.
Currently a Residence Advisor for Illinois Tech.

Past Projects/Work Experiences:

Worked as intern in software engineering for Systems Planning and Analysis Inc.
Research intern at Max-Planck Institute for Quantum Optics.

Research Projects being watched:

Electric field enhancement from nano-sized pyramids.
Quantum entanglement over long distances.

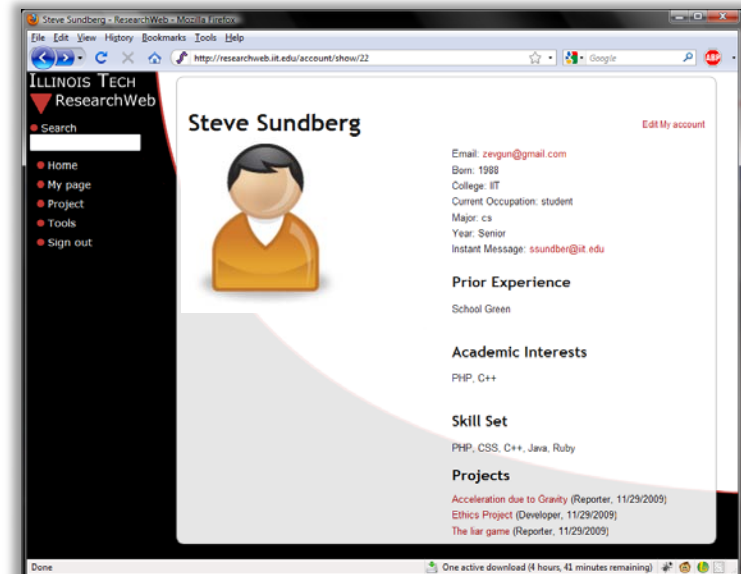
Additional Information:

Research Colleagues:

Yury Stryuk
Tom Cernus
Bethany Nicholson
Anandha Abohy
Zach Cornelius
Max De Courten-Myers
Stephen Sundberg
Professor Robert Ellis
See All

Interests:

Attosecond Lasers
Surface Plasmons
Nanotechnology



Steve Sundberg - ResearchWeb Mobile Version

File Edit View History Bookmarks Tools Help

http://researchweb.iit.edu/account/show/22

ILLINOIS TECH
ResearchWeb

Search

- Home
- My page
- Project
- Tools
- Sign out

Steve Sundberg

Email: zergun@gmail.com
Born: 1988
College: IIT
Current Occupation: student
Major: cs
Year: Senior
Instant Message: ssundber@iit.edu

[Edit My account](#)

Prior Experience

School Green

Academic Interests

PHP, C++

Skill Set

PHP, CSS, C++, Java, Ruby

Projects

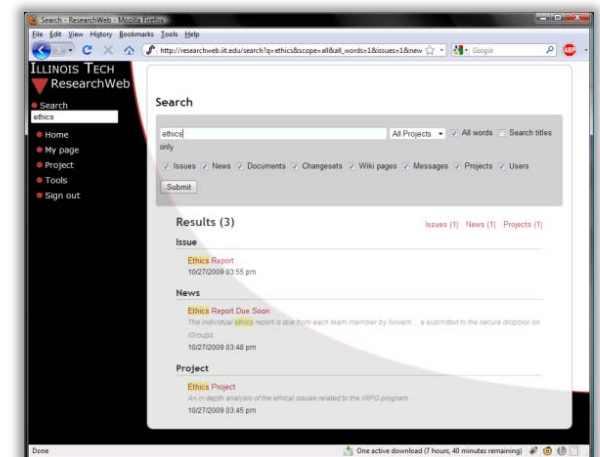
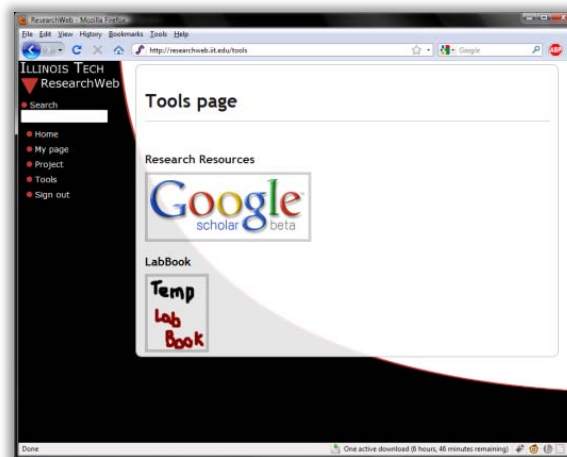
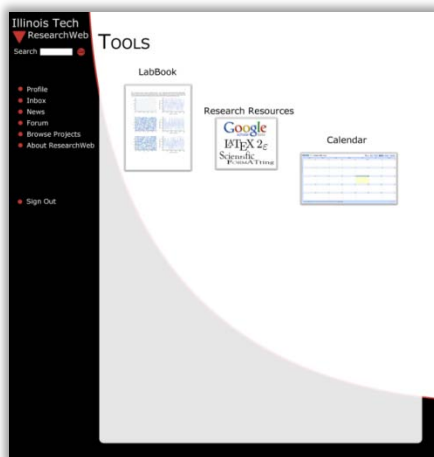
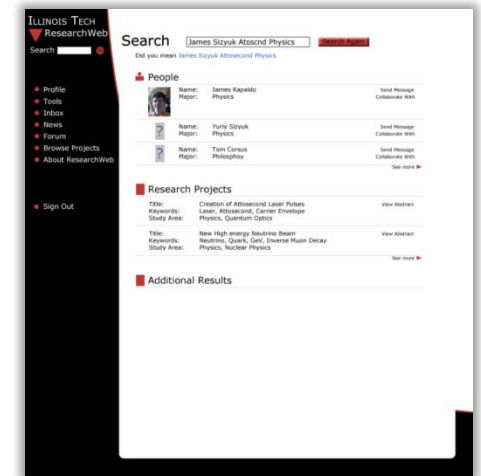
Acceleration due to Gravity (Reporter, 11/29/2009)
Ethics Project (Developer, 11/29/2009)
The liar game (Reporter, 11/29/2009)

Done

One active download (8 hours, 41 minutes remaining)

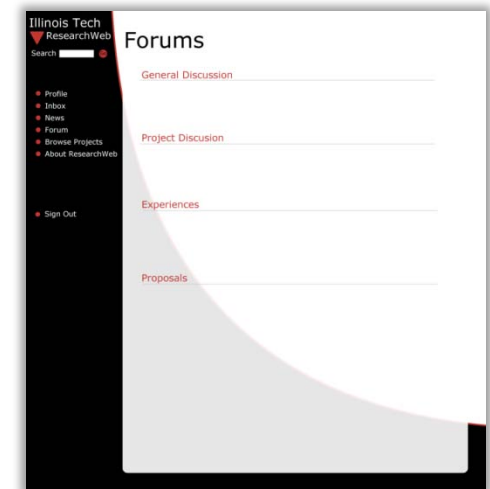
Bare Necessities

- Search
- Research Resources



Future of ResearchWeb

- **Additional tools and features**
Forums, opportunity listings, communication tools
- **Sandbox environment**
- **Flash based voip**
- **Integration of external systems**
- **Public release of ResearchWeb**





Acknowledgements

We would like to thank

- Prof. Robert Ellis, our advisor**
- Prof. Eric Brey, Asistant Dean Office of Undergraduate Research**
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- Nickolay Schwarz, software developer at Centro**
- Sourixat Thavisouk, Executive Producer and CEO of A List TV**
- Jeffery Lee, Marketing consultant of BET**
- Mark Cooney, current server administrator**



Questions?