HUMAN COMPUTER INTERACTION

- AN INVESTIGATION ON THE USABILITY OF THE WEBSITE OF IIT MANDI
- USABILITY ISSUES AND PROSPECTIVE SOLUTIONS
TEAM STRUCTURE

- Harshul Jain: Interpretation of Simulation Results
- S Bhuvaneswari: Research on Usability Guidelines
- Rohit Goyal & Ankur Dixit: Conduction of Survey
- Abhra Basak: Prototype Development
- Dhruv Parmar: Determination of Website Logistics
INTRODUCTION

• What are we doing?
  • Evaluating user’s interactions with the website, and research on usability feedback
  • Determining the degree of accessibility
  • Improvement upon site configuration accounting the above parameters

• Why it is important?
  • A growing institute needs a good website to reach out to prospective students
  • 80% + websites follow some conventions, so users have a biased expectation about certain functionality
DETAIL OF WORK

What did we do? How did we do it?
METHODOLOGY

- Run Simulation using Cambridge Simulator provided with course material
- Fetch website usage data from web server
- Conduct a survey on user satisfaction with current website
- Design a new prototype, accounting for the above limitations to ensure improved experience
CURRENT WEBSITE
SIMULATION RESULTS
SIMULATION RESULTS
NEW WEBSITE (PROTOTYPE)
NEW WEBSITE (HEAT MAP)
NEW WEBSITE (HEAT MAP)
NEW WEBSITE (HEAT MAP)
What does one expect from the website?

SOME REPRESENTATIVE TASKS
ACCESS TO SUPPLEMENTS

- Faculty to access institute webmail
- Students to access students’ webmail
- Universal Access to intranet, Moodle & students’ center
- Industry seeks access to Career & Placement section
ACCESS TO SUPPLEMENTS

FEATURED EVENTS AND NEWS
See More >>

Intranet
Webmail
Our Unique Curriculum
For Prospective Students
From Director's Desk
Career and Placement Cell
NEWS, EVENTS, SEMINARS & TENDERS

• View the latest news and happenings in the institute
• Upcoming events, workshops or shows
• Seminars & Institute colloquium
• Industry seeks access to construction & development tenders
NEWS, EVENTS, SEMINARS & TENDERS
NEWS, EVENTS, SEMINARS & TENDERS

Latest News

B.Tech final year students shift to Kandi campus, 29 September
IIT Mandi is now first among the new IITs to have academic and residential facilities on its main campus at Kandi. In a historic move, 108 B.Tech final year students shifted to their new hostel on September 29th...

Short Term Course on FEMEA at IIT Mandi, 24 July
A short term course on Finite Element Method for Engineering Applications organized by the Institute of Technology Mandi during July 16-20, 2012. The short term course was inaugurated by Prof. T. A. Gondalves, Director, IIT Mandi, Prof. Subrat Sanyal, Prof. Lall Malhotra, Dr. R. C. Sawhney, and Dr. Manoj Dikshant in academic block of IIT Mandi...

Seminar on Computational Intelligence Applications to Renewable Energy, 19 July
A five-day seminar on "Computational Intelligence Applications to Renewable Energy" organized by Indian Institute of Technology Mandi (IIT Mandi) during July 09-13, 2012. The seminar was inaugurated by Prof. Lall Malhotra, acting director of IIT Mandi, Prof. Subrat Sanyal and Prof. B. Subramanian in academic block of IIT Mandi. MORE NEWS

Nestled in the Siwalik Range of the Himalayas, far from the bustle of the metropolis, a new abode of learning has perenniated. A few hours before the Himalayan resort Kullu in Himachal Pradesh, once considered "the end of the habitable world", the youngest IIT is coming up. The location is the forested hills of Kandi on the banks of the Uhl, a tributary of River Beas. The historic town Mandi is 12 km away.

List of shortlisted candidates for CITHR Project positions

Applications are invited for one temporary post of Sr. Library Information Assistant (SLIA) in scheme (Project Mode) at Central Library, IIT Mandi

Call for M.S/Ph.D. programmes for the Even Semester of the Session 2012-13

Faculty positions open for School of Computing and Electrical Engineering, Assistant Professor/Assistant Professor (on Contract)
NEWS, EVENTS, SEMINARS & TENDERS
SEARCH THE WEBSITE

• Search for a particular section of the website
• Quickly find a relevant section without referring to full sitemap
• Seek the required section in the sitemap
SEARCH THE WEBSITE
NAVIGATE MENU

- Quickly find relevant menu items
- Relate menu items to the institute
- Compact Substitute to sitemap
- Visual appeal of menu
Have a problem? We’ll find the solution for you?

USABILITY ISSUES – SOME KEY FINDINGS
SIMPLE STRUCTURE OF SITE

• Clear indication of current location in the website
• Constant link to the home page
• Issue occurs: Site wide
• Solution: Search Engine friendly, self-explanatory URLs
• Recommendation: Breadcrumbs trail with full path of webpage
The past year has seen IIT Mandi grow from a stumbling fledgling to a robust, fully-functional Institute, thanks to yeoman efforts by one and all. Some experimental work done completely in Mandi. They have established contacts with renowned universities, especially the TU9 in Germany. Students are supported by dedicated staff often working beyond the call of duty.

We have processes and systems in place for many academic, student and administration activities. A year ago, with a smaller population and a lower level of activity, the number of decisions I have to take has come down markedly.
ACCESS TO MAJOR PARTS

• Simple Accessible menu
• Minimal movement across menu to find relevant items
• Issue occurs: Navigation menu
• Solution: Easily accessible menu, visual relation to institute
• Recommendation: Sitemap to supplement the menu’s function (under construction)
ACCESS TO MAJOR PARTS
CLEARLY LABELED FUNCTIONALITY

- Functionality that a visitor is most likely to require
- Wherever possible, visitor should be in full control
- Issue occurs: Site wide
- Solution: More navigability features in home page, highlight important sections
- Recommendation: Flexibility in natural workflow – not forced down a particular path, to wait for events that may take a long time
CLEARLY LABELED FUNCTIONALITY

- Visitor should be able to understand what is going on in ongoing interactions
- Consistency across website
- Issue occurs: Site wide
- Solution: Undergo a complete edit of all pages for conciseness and consistency
- Recommendation: Global elements in same position throughout the website, visitor should not have to learn a new interaction style to use website
CLEARLY LABELED FUNCTIONALITY
ACADEMIC RESOURCES

• Course offerings, syllabi and structure – need to be updated on first notice, Obsolete electives still lying unnoticed
• Institute calendar and timetable – should be considered for each class
• Issue occurs: Academics section
• Solution: Course management integrated with Moodle
• Recommendation: Provide an intuitive calendar app for the website that automates the process
### ACADEMIC RESOURCES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ME-364</td>
<td>Power Plant Engineering</td>
</tr>
<tr>
<td>ME-365P</td>
<td>Thermo Fluids Lab</td>
</tr>
<tr>
<td>ME-366P</td>
<td>Solid Mechanics Lab</td>
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#### Electives

<table>
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</thead>
<tbody>
<tr>
<td>CS-365</td>
<td>Artificial Intelligence (EE)</td>
</tr>
<tr>
<td>CS-521</td>
<td>Performance Evaluation of Computer Systems (CSE &amp; EE)</td>
</tr>
<tr>
<td>CS-569</td>
<td>Pattern Recognition (CSE &amp; EE)</td>
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<tr>
<td>CS-580</td>
<td>Advanced Data Structures and Algorithms (CSE)</td>
</tr>
<tr>
<td>EE-301</td>
<td>Control Systems Engineering (ME)</td>
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<td>ME-304</td>
<td>Power Plant Engineering (CSE &amp; EE)</td>
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<td>CY-241</td>
<td>Nanoscale Science and Technology</td>
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<td>CY-243</td>
<td>Engineering Chemistry</td>
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<td>HS-241</td>
<td>Introduction to Drama: Theory and Practice</td>
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<tr>
<td>HS-342</td>
<td>German 1</td>
</tr>
<tr>
<td>HS-343</td>
<td>Political Philosophy</td>
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**Semester: 0**

- **CSE**
  - CS-308: Operating Systems

- **EE**
ALL BROWSERS SUPPORTED

• W3C standards for rendering and accessibility followed
• Built using valid HTML5, CSS, and powered by JavaScript / XML
• Bootstrapped Fluid layout, ensures normalization of the effects of resolution across browsers
• Prototype Website rendering time: 0.22 seconds (excluding images)
FUTURE SCOPE

• All recommended solutions and suggestions remain to be implemented in the website

• This website will continue to serve IIT Mandi for years to come

• Suggested Changes: Website theme according to location, Reduce webpage size, Alt text for images to maintain accessibility, Search Engine Optimization
THANK YOU
CREDITS

- Prototype designed by : Shiv Sankar Baisya
- Heat map Generated by : heatmap.js
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