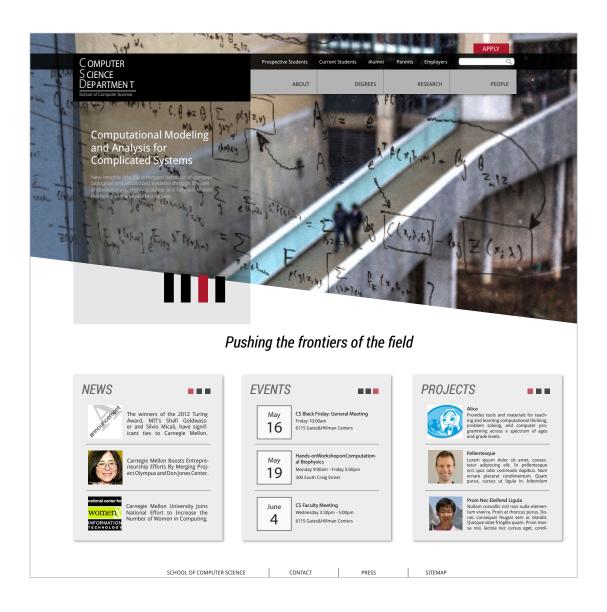
LATE STAGE USER TESTING CSD REDESIGN

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01.MATERIAL

WE TESTED 4 USERS ON A PAPER PROTOTYPE OF OUR HOMEPAGE



02. METHODS

WE ASKED OUR USERS TO GO THROUGH SCENARIOS USING THINK-ALOUD



We designed our scenarios to test the placement of information. One of the biggest problems we found with the original CSD website is their haphazard information architecture. For example, resources for both prospective students and current students are located in the same section with no labelling or heirarchical distinction between the two. When we redesigned the website, we focused on reorganizing content based on our personas' needs. We used late stage user testing largely to confirm that our reorganization made sense.



We put our user testers through common tasks that our personas would do on the CSD website. The user testers went through 9 or 10 scenarios, each written with a different persona in mind. They had to pick one, top-level category from the homepage that they think would contain the information they need. Here are some examples of scenarios we used:

You are interested in researching web servers, but you are curious who you would be working with in this area. Where would you look to find all the professors who are researching web servers?

Imagine you do not live in Pittsburgh and are considering moving here to attend CMU. Where would you look to find information abouting visiting the campus?

You are curious about how difficult it will be for your son to get accepted into a CSD program. Where would you look for information on how many students are accepted each year?

You have been studying computer science at Slippery Rock University, but you are looking to transfer to a more challenging program. When looking at CSD, you are curious to know if any of your credits from SRU will transfer over. Where would you look for this information?

You are working as a research assistant on a project within the department. You need to contact the professor you are working with about the project. Where would you look for his contact information?

03. FIRST IMPRESSIONS

WE ALSO OBSERVED THEIR INITIAL REACTION TO THE HOMEPAGE



Another problem with the original website was how underwhelming it was. But more than just lacking the "wow" factor, it also failed to convey that it is the official repository of information for one of the nation's most prestigious computer science departments. In fact, it did so badly on first impressions in our previous round user testing that many our user testers didn't recognize it as the website for the CSD.



Our first impressions section of the test consisted of 4 questions. We asked our users these following questions before we asked them to do the scenarios.

Where does your eye go first?

What are your first impressions of the website?

What do you think this website might help you do?

Is there anything else you haven't said yet that you'd like to mention about the website?

04. RESULTS

HERE ARE SOME TAKEAWAYS FROM LATE STAGE USER TESTING



First impressions.

"It looks very intelligent because of all the writing on the chalkboard made me think of Eisenstein and his theory of relativity." -P4

"I definitely see a bunch of stuff about science. Like it says Computer Science Department, the formulas I previously mentioned (picture of window), word 'Analysis', 'Projects'". -P3

"I would probably at this point start reading the bottom of the page to see what it's about. News, events, and projects. So I assume it's all relevant to the Computer Science Department. News about the Department, events in the department, and projects in the department." -P4

"Well if you want to go artistic, its neutral colors. So its definitely more, I'd say, professional looking as opposed to something flashy trying to grab someone's attention." -P3

"The numbers are a little bit... its hard to look at. It's very busy." -P2



Scenarios.

"I would definitely, based on the scores, see if I would even be accepted to this school. I would look at other schools that would accept my schools. But I guess for the sake of this survey, I would probably start off by going to the homepage. And then, type in the search bar for the department or for the major I was looking at to see what comes up in their search." -P3

"To apply to a program. Well I would go to the prospective student page. Or as I just now noticed, there's an actual Apply button link."-P3

"The About link might give me some information. The section about projects might give me an idea about this as well. The About link, Im hoping, my thought would be it would give a brief description about the department or even the various degrees within the department." -P4

05. FINAL DESIGN

THESE CHANGES WERE DIRECTLY INFLUENCED BY OUR TESTING RESULTS

1. Changed the logo to be more prominent. Alumni **COMPUTER SCIENCE DEPARTMENT** DEGREES RESEARCH PEOPLE 2. Minimized business. Computational Modeling and Analysis for Complicated Systems 3. Got rid of the quote; too vague, not specific to the **NEWS EVENTS PROJECTS** CSD. The winners of the 2012 Turing Award, MIT's Shafi Goldwasser and Silvio Micali, have significant ties to Carnegie Mellon. May 16 Hands-on Workshop on Computational Biophysics
Monday 9:00am - Friday 5:00pm rnegie Mellon Boosts trepreneurship Efforts By erging Project Olympus and on Jones Center. 19 Carnegie Mellon University Joins National Effort to Increase the Number of Women in Computing CS Faculty Meeting .lune 4 6115 Gates&Hillman Centers SCHOOL OF COMPUTER SCIENCE

4. Added Employers to the footer; even though it is also located in the secondary nav menu, most of our user testers expected to find career information in the footer.

APPFNDIX 1

SCENARIOS

You are curious about how difficult it will be for your son to get accepted into a CSD program. Where would you look for information on how many students are accepted each year? (degrees or prospective students)

You graduated 5 years ago and you have lost touch with most of your classmates. You're wondering what they are up to now and are hoping to sign up for updates about what they and other graduates are doing in the field. Where would you go to sign up for these updates? (alumni)

You've always thought robots were really cool. You're curious what you would get to do if you focused your PhD on work within robotics. Where would you look to find a description of work within robotics? (research)

You work for Palantir Technologies and you are looking for an intern this summer. You are hoping that you can recruit a student from a CSD program. Where would you go on the CSD website to share this internship opportunity with the department? (employers)

You are a graduate student who is curious how many units (credits) you are allow to register for each semester? Where would you look to find this information? (current students)

You teach machine learning with CSD. You are curious what the other professors are currently working on. Where would you look to find more information about this? (people, research)

You are a current student within CSD and you're curious if you can have an additional major in Computer Science. Where would you look for this information? (degrees)

You have been studying computer science at Slippery Rock University, but you are looking to transfer to a more challenging program. When looking at CSD, you are curious to know if any of your credits from SRU will transfer over. Where would you look for this information? (prospective students)

Where would you look to find out who is the head of the CSD Department? (people)

APPENDIX 1

SCENARIOS (CONT.)

You are interested in researching web servers, but you are curious who you would be working with in this area. Where would you look to find all the professors who are researching web servers? (research, people)

If you want to go to the homepage, what would you do? (click logo)

Imagine you do not live in Pittsburgh and are considering moving here to attend CMU. Where would you look to find information abouting visiting the campus? (prospective students)

You are a high school boy who just discovered girls. You are considering attending CSD and wondered how many girls are in this program. Where would you look to find out how many girls there are? (about)

You are looking to schedule classes for next semester and you are unsure what courses you still need to take. Where would you look for this information? (degrees)

You work within the administration of MIT's computer science department. You are curious about the kind of research being done with CSD. Where would you look on the website to learn more? (research)

You have been working on your application for the CSD, but you can't remember when it needs to be turned in by. Where would you look for information about this deadline? (prospective students)

You are working as a research assistant on a project within the department. You need to contact the professor you are working with about the project. Where would you look for his contact information? (people)

Your parents cannot afford to pay the tuition for your education. You are curious how much in loans you will have to borrow in order to attend a CSD program. Where would you look for this information? (degrees)

You just received your SAT results in the mail and are curious if you scored well enough for a program in the CSD department. Where would you look to find this information? (prospective students)

APPENDIX 1

SCENARIOS (CONT.)

You recently graduated from a CSD program in the last 2 years and you are curious what has been going on with the department since then. Where would you look to inform yourself about what's new with the department? (Home page)

You are planning what you are going to do for your dissertation next semester, but you are curious what has been done recently. Where would you look for a list of recent dissertations? (research)

You work for the Pittsburgh Post Gazette and need some information about a book that was published by a CSD professor. Where would you go on the website to get the information you need? (press)

Your son is considering attending a CSD program next fall. You're concerned if he will be able to get a good job after attending this program. Where can you look to find out where other CSD graduates are now working? (degrees)

If you were looking to apply to a program, where would you go first? (apply or prospective students)

You need to get ahold of the Main Desk Reception. Where would you look for the information you need to do this? (people)

You are curious about the kind of work you will get to do as a student within a CSD program. Where would you look for more information about this? (projects or research)

You heard that you have to choose a minor for the bachelors program you are applying to, but you don't know what you can minor in. Where would you look for this information? (degrees)

APPENDIX 2

SAMPLE USER TESTING SCRIPT

Participant #:
User Name:
Date of Session:
Time of Session:
Location of Session:
Checklist:
recording device (fully charged and with enough available memory)
this talking script
Pen and Paper
laptop
pdf file with website prototype/screenshots
2 copies of consent form
1 form of compensation (cash or gift card)

Part I: Introductions, Consent Form, Recording

[Introduce yourself. Thank the participant for agreeing to participate.] As you know, our task today involves getting feedback for a campus client on their departmental website. If it's alright, I'd like to begin by having you read through and sign our consent form. [Hand them 1 copy of the consent form.] The checked items are the ones that pertain to our study. If you have any questions about the form, feel free to ask.

[After consent form is signed and you double check everything is filled out...] Great, thanks! Here is a copy for you to keep. [Hand them the second copy.]

And just to double check, is it okay if I record our session? [Get confirmation.] Thank you. Just so you know, our data today will be shared with other members of our class, and with our campus client, but your name will not be associated with the data in anyway. If it's alright, I'll begin recording now. [Turn on recorder now.] If at anytime you need to stop, let me know.

Part II: Pre-Test Questions

Okay. I have a few initial questions for you before we begin.

- 1. Are you currently a member of the CMU community? [If yes, continue to question 2, 3, and 4.] [If no, continue to question 5.]
- 2. What is your department and role(s) within that department (student, faculty, TA, staff, etc)?
- 3. What are the CMU websites that you visit?
- 4. How many times per day/week do you visit each of these websites? [proceed to question 6.]
- 5. Have you ever visited a college website before? If yes, how recently have you visited that kind of website?

Part III: Introducing/modeling the Think Aloud

Great, thank you. Alright, now we're going to move on to the part of the study that reviews aspects of the website we are designing. It's important for you to know that we're testing the website - not you - so if you get stuck on something, that's okay. That helps us understand what we can do to improve.

As part of our study, we'll be using a method called a "think aloud protocol." The point of this method is to help me understand what you are thinking while you perform various tasks, so I'm going to ask you to 'think aloud' as you read. What I mean by 'think aloud' is that I want you to tell me EVERYTHING that you are thinking from the first time that I ask you to start a task until you finish. You don't have to plan out what you say or try to explain to me what you are saying. Just act as if you are alone, speaking to yourself - just a little louder.

Just so you know what I mean, I'll demonstrate thinking-aloud for you. So I'm going to think-aloud as I try to figure out how many windows are in my house/apartment.

[Model the Think Aloud]

Alright, now, you try thinking aloud. Try thinking through how you would arrive at the answer of what you get when you multiply 14 times 7.

Good! That's great.

Alright, just so you know, as you're doing the tasks, if you get silent for awhile and forget to think aloud, I'll prompt you with a gentle reminder to, "Please keep talking."

Do you have any questions about thinking aloud?

Great. Let's begin. I'll prompt you with a set of questions and tasks, and you can think aloud as you answer.

Part IV: First Impressions/Design

[Show them screenshot of homepage of our design. We can compare these questions to our last user testing of the current CSD homepage]

Without clicking or navigating away from this page, I am going to ask you some questions.

- 1. Where does your eye go first?
- 2. What are your first impressions of the website?
- 3. What do you think this website might help you do?
- 4. Is there anything else you haven't said yet that you'd like to mention about the website?

Part V: Scenarios of User Tasks/ Checking Placement of Information

[Show them our homepage.]

Without clicking or navigating away from this page, I am going to ask you some questions.

Set 1:

You are interested in researching web servers, but you are curious who you would be working with in this area. Where would you look to find all the professors who are researching web servers? (research, people)

If you want to go to the homepage, what would you do? (click logo)

Imagine you do not live in Pittsburgh and are considering moving here to attend CMU. Where would you look to find information abouting visiting the campus? (prospective students)

You are a high school boy who just discovered girls. You are considering attending CSD and wondered how many girls are in this program. Where would you look to find out how many girls there are? (about)

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Part VI: Post-Test Questions

Okay, great. Thank you. We are almost done. Just a couple of general follow up questions left. [Ask questions and take notes below.]

Do you currently attend school? If yes, what level of education are you pursuing? What is the area you are studying? If no, are you currently looking at applying to a school?

Have you previously attended a school that you receive updates from or visit their website occasionally?
Do you have any children, nieces, nephews, etc. who are currently looking to attend college? If yes, have you assisted them in their search process is any way?
Do you currently teach at a school? If yes, can you describe your role at that school?
Do you work is a job that has the authority to hire new people?
Do you work for a news source of any form?
Thank you so much for your time and help today. We really appreciate the input you've given us today!