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Carnegie Mellon University
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February 20, 2014

Frank Pfenning
Jordan Harrison
Jennifer Landefeld
Computer Science Department
Carnegie Mellon University
4000 Forbes Avenue
Pittsburgh, PA 15213

Dear Frank, Jordan, and Jennifer:

Thank you for considering our recommendations for the redesign of your department's website. We are grateful for all of the information you have shared with us at our meeting on January 22nd and through email. We are all excited to be working on this project with you.

Since our last meeting, our group has performed a content audit of the website to get an idea of what information can be found where. Using the information from our meeting, our audit, and additional sources, our group has defined who uses your website and the tasks they expect to be able to do once they are there.

Enclosed with this letter is our report defining the users of the Computer Science Department website, their tasks, and the issues they are encountering. Please review this report for a better understanding of who your users are and the types of issues they are encountering when using the present website.

We will be using this information and our benchmarking research as the foundation for our initial wireframe designs. We appreciate any feedback or input you can give us on our findings thus far. Thank you and we look forward to working with the Computer Science Department this semester.
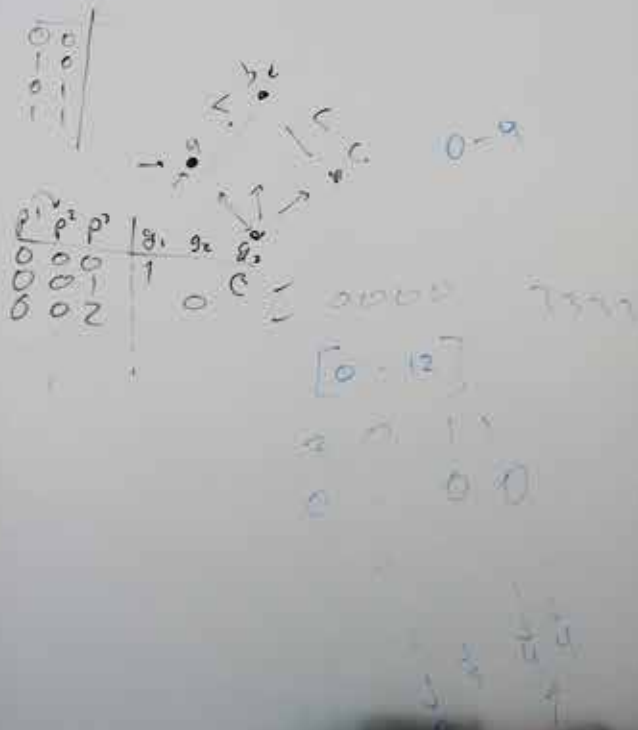
Sincerely,

Lindsay Corry, Mu-Hwa Kuo, and Therese Joseph

Enclosure: Who Is This For? A User Centered Analysis of the Website of the Computer Science Department at CMU

Who Is This For?

A User Centered Analysis of the Website of the
Computer Science Department at CMU.

Lindsay Corry
Therese Joseph
Mu-Hwa Kuo

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executive summary

The Computer Science Department at Carnegie Mellon University has a lot of attention directed towards it. The program consistently ranks at the top of lists put out by publications like *Forbes Magazine, US News and World Report,* and *The Wall Street Journal.*[1] The majority of undergraduates from CMU receive a Bachelors of Science in Computer Science. The department is also undergoing a departmental review in the fall of 2014.

Representatives from the CSD, Jordan Harrison and Jennifer Landefeld, approached the Web Design course being taught by Necia Werner, Director of Professional and Technical Writing, to lead the redesign. They want the new website to better reflect the identity of the CSD, to showcase the monumental work that comes out of the program, and to act a resource for the current students and faculty. All of this is in service of their number one priority for the website: recruitment of new students.

This report uses the voice of the users to produce a user centered approach to web design. We create personas to accurately represent the potentials users of the CSD website based on the race, gender, and socio-economic status of the CSD's existing student body and alumni. Through these personas, we analyze the existing website's content objectives and ease of usability.

In our research, we have determined

- **The CSD can't reach the people they want to reach**
  The website fails their content objectives by not reaching their target audience

- **Users can't find what they are looking for**
  Users are confused by the navigation because the architecture does not adequately guide them to the information they want.

This is the first step in the process of a user centered redesign of the CSD website. By using real voices to shape our information architecture, we can develop tactics that can be employed by the CSD to better connect with their site visitors: answer their questions, fulfill their goals, and, ultimately, be accessible to all.

introduction

Computer Science is the most popular degree program at Carnegie Mellon University, with 12% of the 2012 graduating class earning a Bachelors of Science in the field. According to *Forbes*, graduates from the department have the highest starting salaries in the nation. CMU is also internationally renown, placing in the top 20 universities in the world on lists published by *The Wall Street Journal* and *Academic Ranking of World Universities*. The *US New and World Report* ranks the PhD program in the CMU Computer Science Department as number one in the nation.[1]

With this much attention directed towards the department on top of an impending departmental review in the fall of 2014, the CSD is seeking to redesign their website to better represent the CSD identity. Representatives from the CSD, Jordan Harrison and Jennifer Landefeld, approached Necia Werner, the Director of Professional and Technical Writing, to have her Web Design class lead the redesign.

Our report looks at the content of the existing website and compares it to the needs, expectations, and habits of CSD's user base. First, we identify the users of the CSD website using information Harrison and Landefield provided for us. Then, we create 13 personas to best represent the user groups. We compare the users and their tasks—*what do they want to do on the website?*—to the existing content and architecture—or *what they can do on the site, at the present?* This allows us to point out disconnect in the current user base versus the CSD's ideal user base.

This analysis is the first step in the process of a user centered redesign of the CSD website. We strive to bring in real voices to shape the information architecture. By giving names, faces, and motivations to the user base, we can develop tactics that can be employed by the CSD to better connect with their site visitors: answer their questions, fulfill their goals, and, ultimately, be accessible to all.

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[1]See Appendix II.

methodology

What do they want?

According to our clients, Harrison and Landefeld, <u>recruitment for the Computer Science Department is the number one priority</u> for the CSD website. Other purposes for the website—such as being the information resource for current students and faculty, showcasing the projects done at CSD, and representing the CSD identity—exist in service of that priority.

What did we do?

We conducted a quantitative audit of the content of the existing CSD website, with an eye towards usability and content objective. We sought to answer the question: Who is the site currently working for?

We then created personas to represent the potentials users of the CSD website based the CSD's existing student body. We tried to represent the CSD website users as accurately as possible. Diversity in race and gender were based on statistics listed in the January 2013 report of the Diversity Advisory Council and on the School of Computer Science Fact Sheet published by the CMU Admissions Office.[1] Socio-economic factors, such as salary, were based on the US News College Report.[2]

We considered their needs that will bring them to the CSD site, anticipated the questions they will have when they are on the site, and considered their expectations for an informational university website based on their backgrounds.

Finally, we matched up the needs, tasks, and expectations of our personas with the data from our audit. We looked for when the existing content matched up with their targeted user base—and when it didn't.

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[1]The CSD at CMU boasts one of the nation's highest female-to-male ratio in a computer science department. About 30% of the students are female.

[2]The average starting salary for a CSD graduate is $84,400, according to a list published by *Forbes Magazine*. See Appendix II.

Who is using the site?

According to Harrison and Landefeld, the priority of the website is recruitment. With this in mind, we have separated our identified users into three tiers: Primary, Secondary, and Tertiary. We will go more in-depth into these users in our Users Profiles. (Pages 8-20)

PRIMARY	Prospective Undergraduates Prospective Transfers Prospective Graduates Prospective Doctorates Parents (of Prospectives) Industry	These users are all from outside of Carnegie Mellon University, and they are looking to gain more information about the school and the department. The first four are prospective students, which are exactly the users the CSD wants to target; the parents are just as influential in recruitment and admission as the prospectives; the industry users, if impressed by the CSD identity gleaned from the website, directly influences the future of many graduates and future recruitment.
SECONDARY	CMU Alumni Current Undergraduates Current Graduates Current Doctorates CMU Faculty	These users are in the second tier because, while the website is a great resource for these users, it is not the only place where they can go to accomplish their tasks. These users make up of an inner circle—they have all been, or had once been, accepted into the CMU community. They are not as crucial to recruitment.
TERTIARY	Press Competitor Schools	These users were mentioned by the clients to be potential users of the website, but it is not the website's priority to target these users. However, we still need to consider their needs, expectations, and tasks because their future actions will likely influence the reputation of the CSD.

profile: Andrew

User Group: Prospective Undergraduate
Gender: Male
Age: 17

Andrew is a high school senior interested computer science. He likes new technology, anime, Linux, and knowing how things work— he's a bit of a nerd that way.

Motivations Behind Tasks

Things that interest him in a college are: the campus culture, extracurriculars, the city, and the ratio of male-to-female students. Of course, he is also interested in getting a good education and looks up the curriculum to see what type of classes he would have to take. When he realizes that CMU is one of his top choices, he wants to gather information about deadlines, application requirements, tuition costs, financial aid, and cost of living in Pittsburgh. If he decides he has a chance, he will begin the application process.

Issues He Encounters

The first thing Andrew clicks on is "The B.S. in Computer Science", which leads to a section that is only relevant to current students. The "Overview of B.S. in Computer Science" link is more relevant, but he is unable to find it immediately from the home page.

Under "Curriculum" within "the B.S. in Computer Science" page, there is a link that connects Andrew to the curriculum and outdated available courses. Under the link is a paragraph explaining the change in courses – again, only relevant to current students.

When Andrew clicks on "Undergraduate Admissions" it takes him to a page that says, "Not Found".

The link "Would you like to visit the Computer Science Department" finally takes him to an informative, but poorly designed, page. This is also where he finds the relevant information on admissions and campus life, but he would not have otherwise known this if he didn't plan on visiting CMU. There is no other way of accessing this information from the website.

TASKS	
Why CMU?	✓
Campus Information	✓
Curriculum	✓
Degree Information	
Jobs Outlook	
How To Apply	✓
Deadlines	✓
Transfer Credits	
Financial Aid	
Cost	✓
Extracurriculars	✓
About Pittsburgh	✓
Student Profiles & Projects	
Faculty Profiles & Projects	
Illustrious Alumni	
CSD Events & Calendar	
News	
Press Releases	
Contact Information	✓

profile: Emma

User Group: Prospective Undergraduate Transfer
Gender: Female
Age: 20

Emma currently attends a state school but is looking to transfer. She wants to switch her major to Computer Science, which she became interested in because of web design. A closet geek, she is interested in CMU because of its reputation for being nerd central.

Motivations Behind Tasks

Emma is looking at the website because she wants to know if the CSD at CMU is worth transferring to. She is curious about the classes she would be taking, the cost difference compared to her school, and what she still needs to have done before she applies. She would like to graduate on time. She does not know anyone at CMU, and wonders if extracurriculars would help her meet new people. She wonders what the deadline is to apply.

Issues She Encounters

Emma is able to learn about the B.S. in Computer Science by clicking the link "Overview of B.S. in Computer Science".

Emma is able to read about the curriculum by clicking the "curriculum requirements" link.

There is no information on the B.S. in Computer Science page that can inform Emma about the requirements for transfer or which of her credits would count. The deadline to apply is also not listed as well as a link to apply. There are also no stats about past transfer students.

She is unable to find information about CMU's campus, culture, and extracurricular activities. The only way she is able to find this information is to first click the link "Would you like to visit the Computer Science Department?" and then click the link "Carnegie Mellon Undergraduate Admissions".

After going through a few pages of this site, she still does not know anything about Pittsburgh. She decides to Google that information instead.

TASKS	
Why CMU?	✓
Campus Information	✓
Curriculum	✓
Degree Information	
Jobs Outlook	
How To Apply	✓
Deadlines	✓
Transfer Credits	✓
Financial Aid	
Cost	✓
Extracurriculars	✓
About Pittsburgh	✓
Student Profiles & Projects	
Faculty Profiles & Projects	
Illustrious Alumni	
CSD Events & Calendar	
News	
Press Releases	
Contact Information	✓

profile: Tim

User Group: Prospective Master Student
Gender: Male
Age: 25

Tim already has a Bachelors degree in computer science. He currently works in IT at a help desk, but is looking for advancement. In his spare time, he watches Family Guy and plays Dungeons and Dragons.

Motivations Behind Tasks

Tim wants to know if it is worth it for him to pursue a Masters degree. He looks at the curriculum to see what knowledge he can build on his existing CS education. Tim is concerned about getting a job in the future because he really doesn't want to work at a help desk anymore, so he look for information about alumni from the program to see where they are now, and where he could eventually be in the future. He also needs to pay attention to the tuition cost. He might be curious about Pittsburgh, but that is not his main concern.

Issues He Encounters

Tim is able to learn about the M.S. in Computer Science by clicking the "M.S. in Computer Science" link on the masters page. On this page he can also be directed to the curriculum. From there, he is also able to click the link "MS program in Computer Science Visitors Page" where he can find information about CMU and Pittsburgh.

From the "MS program in Computer Science" page he is also able to click a link to apply, which also where he finds when the deadline is.

There is a sentence saying what you can specialize in but there is no information about job outlooks of the program.

He is not able to find how much the program costs or where alumni from the CSD Masters program are now.

TASKS

Why CMU?	✓
Campus Information	
Curriculum	✓
Degree Information	✓
Jobs Outlook	✓
How To Apply	✓
Deadlines	✓
Transfer Credits	
Financial Aid	
Cost	✓
Extracurriculars	
About Pittsburgh	✓
Student Profiles & Projects	✓
Faculty Profiles & Projects	
Illustrious Alumni	✓
CSD Events & Calendar	
News	
Press Releases	
Contact Information	✓

profile: Sara

User Group: Prospective PhD
Gender: Female
Age: 26

Sara completed her masters in computer science from another school. She is an innovator and forward thinker, and likes to ideate projects as well as program them into existence. She wants to shape new technology and aspires to lead a start-up. She is a secret foodie.

Motivations Behind Tasks

Sara wants to get the most out of her education, so she is very interested in working with the school/faculty and is wondering if that is a possibility in the PhD program at CMU. She also wants to know what working with the faculty is like and what research areas are presented in the PhD program. Sara really likes food and is wondering what types of restaurants are around Pittsburgh. After looking at all the information and liking what she sees she decides she wants to apply; but first she needs to check the deadline for the application. She still has time to apply so she begins the application process.

Issues She Encounters

Sara is able to learn about the faculty and their research by pressing "Faculty Research Guide" on the Ph.D. in Computer Science page, which directs her to another page of the website.

She is also able to learn all about the program (including working with the school/faculty) by pressing "The Computer Science Ph.D. Program document", which takes her to another page with an attached pdf document. This is a very informative document, but is lengthy if she wants a brief description of the program.

Sara found all she needed to the deadline to apply by pressing "Application" on the Ph.D. in Computer Science page – which takes you to an external link hosted by SCS.

Sara is unable to find any information about Pittsburgh.

TASKS	
Why CMU?	✓
Campus Information	
Curriculum	
Degree Information	✓
Jobs Outlook	
How To Apply	✓
Deadlines	✓
Transfer Credits	
Financial Aid	
Cost	
Extracurriculars	
About Pittsburgh	✓
Student Profiles & Projects	✓
Faculty Profiles & Projects	✓
Illustrious Alumni	✓
CSD Events & Calendar	
News	
Press Releases	
Contact Information	✓

profile: Mr. & Mrs. Lee

User Group: Parents
Gender: Female and Male
Ages: It's rude to ask

Mr. Lee is a commercial real estate broker. Mrs. Lee works in the nonprofits. They want their son to focus on school 24/7 while also enjoying the cultural arts. They live in a beautiful house in an affluent suburb that compensates for their loveless marriage. Their common points of interest are the grand aspirations they have for their only son.

Motivations Behind Tasks

Mr. and Mrs. Lee are researching universities for their son, because they are the ones paying for college and they are determined not to leave any stone unturned. They are on the website because they know, through word of mouth and through ranking sites like *US News Report*, that Carnegie Mellon University has a reputation for being a good school. They are not familiar with the city of Pittsburgh; they are especially concerned with how safe the city is and how much it costs to live there. They also fret over their son's AP classes transferring and his SAT scores.

Issues They Encounter

Neither of them have science backgrounds, so they do not understand the current Vision page detailing Computational Thinking and why, exactly, that sets CMU apart from its competitors. The research-heavy focus of the General Info section is also lost on them.

The section titled What Distinguishes Us is unhelpful— while they appreciate being told what distinguishes CMU from other universities are "the quality and impact of [their] research," "leadership in education," "supportive culture," "the number of female undergraduates," and "the unusual organizational structure," they have a hard time visualizing these things and coming up with examples.
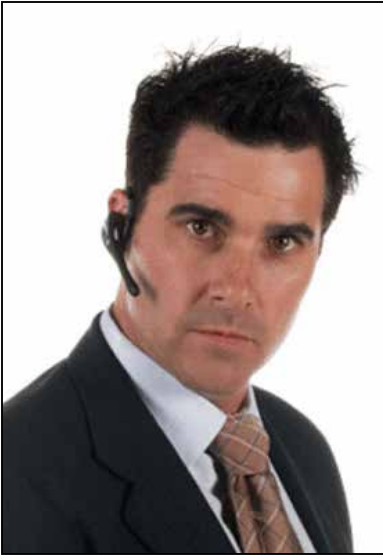
They would navigate to the Bachelors page, under Education. Most of the content on that page links off the CSD site, which confuses them. It also gives them many options for programs of study other than Computer Science.

They are unable to find information that they are most interested in, such as tuition costs and financial aid. They navigate four layers down: Educations > Bachelors > B.S. in Computer Science > Prospective Students > Undergraduate Admissions, only to be encountered with a broken link. They give up at this point.

TASKS	
Why CMU?	✓
Campus Information	
Curriculum	
Degree Information	✓
Jobs Outlook	✓
How To Apply	✓
Deadlines	✓
Transfer Credits	✓
Financial Aid	✓
Cost	✓
Extracurriculars	
About Pittsburgh	✓
Student Profiles & Projects	
Faculty Profiles & Projects	
Illustrious Alumni	
CSD Events & Calendar	
News	
Press Releases	
Contact Information	

profile: Lucas

User Group: Industry
Gender: Male
Age: 39

Lucas graduated from Stanford, works at Palantir Technologies, and is not affiliated with CMU. He is single and a bit of a player. He is impatient with other people, but when it comes to his own ideas, he has all the time in the world.

Motivations Behind Tasks

Lucas in on the website because he is in a hiring position at Palantir, and he has been receiving applications from CMU students and graduates. He wants to know supplemental information about the CSD so he gets a better picture of the graduates coming out of the program and applying for jobs at his company.

Issues He Encounters

Lucas is a very busy man, so the first thing he looks for is a search bar to type in his query. But he can't find it on the home page.

Now that he's on the website, he's curious about the current ongoings of CMU's CSD and how it compares to his alma mater. He quickly notices that the most current news story is from two years ago.

The only heading that interests him is Who's Who, but this leads to faculty contact information, which means nothing to him.

He eventually Googles the information he is looking for.

TASKS	
Why CMU?	
Campus Information	✓
Curriculum	
Degree Information	
Jobs Outlook	
How To Apply	
Deadlines	
Transfer Credits	
Financial Aid	
Cost	
Extracurriculars	
About Pittsburgh	
Student Profiles & Projects	✓
Faculty Profiles & Projects	
Illustrious Alumni	
CSD Events & Calendar	
News	
Press Releases	
Contact Information	✓

profile: Alex

User Group: Alumni
Gender: Male
Age: 28

Alex graduated from CMU with a B.S. in Computer Science. He now works for a consulting company in La Jolla, CA, making slightly over $100,000. He is a yuppie, though he doesn't identify himself that way and he doesn't like labels. He lives with his girlfriend in a long-term, monogamous relationship.

Motivations Behind Tasks

Alex visits the CSD website to check up on faculty he used know, to look at current department projects, and to see if the projects he used to work on are still featured. He also likes reading about the CSD in the news out of school pride. He is also mining for gossip, but he won't ever admit that.

Issues He Encounters

Alex quickly realizes that the website is rarely updated, with the most recent story in the News section posted two years ago. The home page also circulates through randomized stories that doesn't lead to news; they lead to current professor's websites, which, Alex is not interested in.

He also looks to the People section first for updates on faculty, but realizes that the information is under the Research heading. When he does find the faculty members he is interested in, the faculty pages are so visually different that he thought he was directed offsite, even though the pages are hosted on the CSD's website.

Alex also looks for a search bar to type in the name of a specific person or project, but is unable to find it on the home page. He never finds the search bar, because the only way to find it is under headings he is not interested in because he already graduated: General Info and Education.

TASKS	
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Extracurriculars	
About Pittsburgh	
Student Profiles & Projects	✓
Faculty Profiles & Projects	✓
Illustrious Alumni	✓
CSD Events & Calendar	
News	✓
Press Releases	
Contact Information	

profile: Trish

User Group: Current Undergraduate
Gender: Female
Age: 19

Trish is an undergraduate at CMU and is sleep deprived. As a freshman, she lives on campus. Her major is Computer Science and her minor is in Media Design.

She belongs to the Online Gaming Society (OGS), because she likes video games. She also belongs to a sorority (Alpha Phi), because she likes to mess with other people's expectations.

Motivations Behind Tasks

The main reason she checks the CSD website is for her program's curriculum. She wants to make sure she is taking the right classes in order to graduate. If she is already on the website, she is interested to see if her department is making the news. She also checks the profiles of teachers she might take classes with in the future, or for the contact information of her current ones. On a whim, she is also looking at degree requirements for the Masters and PhD programs, in case she wants to pursue that in the future.

Issues She Encounters

Trish has already been on the website before, so she already knows where to go to find her degree requirements and for faculty information. She is not happy with it, because she remembers how she didn't know the difference between Who's Who and Faculty List the first time she was on the site.
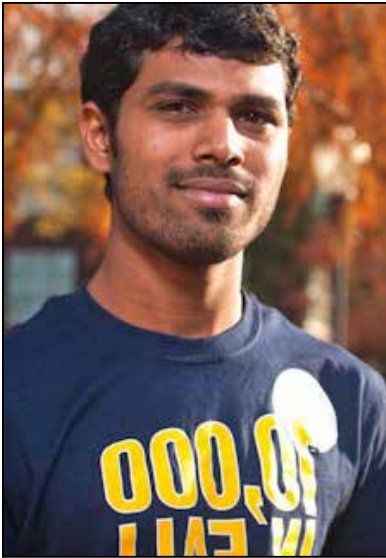
She never uses the website to find financial aid information, because the first couple of times she navigated from Education > B.S. in Computer Science > Student Resources, it linked her to the SIO. So now she just goes straight to the SIO.

She also wonders why the link to Undergraduate Admissions is broken.

TASKS	
Why CMU?	
Campus Information	
Curriculum	✓
Degree Information	✓
Jobs Outlook	
How To Apply	
Deadlines	
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Financial Aid	✓
Cost	
Extracurriculars	
About Pittsburgh	
Student Profiles & Projects	
Faculty Profiles & Projects	✓
Illustrious Alumni	
CSD Events & Calendar	✓
News	✓
Press Releases	
Contact Information	✓

profile: Aleem

User Group: Current Masters Student
Gender: Male
Age: 26

Aleem lives in Shadyside and works as a research assistant. Between school and work, he is normally sleep deprived, but he still finds time to hang out at the Steel Cactus. His friends call him Al.

Motivations Behind Tasks

Al comes to the website for quick reference and information. He reviews his degree requirements and skims financial aid information. If he has a new professor this semester, he'll check out their profile before heading to class. This is also where he will look if he can't find a phone number or email address. While he's on the website, he might skim the news and department events. He doesn't normally come to the website specifically to look at these areas.

Issues He Encounters

Al is planning his schedule for the upcoming semester. The problem is that he can't remember which required courses he still needs. So, he decides to visit the CSD website to help jog his memory. Initially, Al believes he will find the information he is looking for under Masters. When Al doesn't see the curriculum or a link to it on the first page, Al starts clicking at random. He gets turned around and eventually finds the curriculum buried in a paragraph. He wishes he would have just called his advisor. Of course, that number is also on the website. But he is experienced at searching through the faculty and administrative staff directories.

To cool off, Al skims through the news stories and department events. But the news is over a year old and the events calendar is full of events from other departments. This whole process makes him exhausted. A quick peek at financial aid information and Al decides to leave because he can't find related information after clicking on several links.

TASKS	
Why CMU?	
Campus Information	
Curriculum	
Degree Information	✓
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Student Profiles & Projects	
Faculty Profiles & Projects	✓
Illustrious Alumni	
CSD Events & Calendar	✓
News	✓
Press Releases	
Contact Information	✓

profile: Oliver

User Group: Current Ph.D. Student
Gender: Male
Age: 28

Oliver likes to read comics. As a dedicated comics fan, every Wednesday morning he visits his local comic store to pick up new issues. Others think that he is socially awkward. He doesn't understand why. He also hates *The Big Bang Theory*. Ironically, that show is his lifestyle.

Motivations Behind Tasks

Oliver visits the website mostly out of need. He needs to review the deadlines for his Phd program and looks over financial aid as a guideline for how to pay for it. He pulls up the contact information to call a faculty or administrative staff member. Once Oliver is on the website, he may browse the news stories and the department events. The only time he comes to the website with the intention of staying is when he is reviewing information about himself. His profile page, his research projects, and news stories featuring him - these get reviewed regularly by Oliver.

Issues He Encounters

Oliver come to the website often to find phone numbers. He only wishes that there was one place to look for this information instead of three. Everytime he goes to call, Oliver must pause and categorize the person as faculty, administrative staff, or a grad student. Oliver also wishes that he could remember how to find his curriculum requirements. Everytime, he clicks on the PhD link on the homepage and it's not there. So he clicks around for a bit until he finds it. But he almost misses that he has found it because after he clicked on curriculum, all of the navigational options changes and he is no longer sure of where he is on the website.

When looking up himself, Oliver is disappointed that he cannot search for his name somehow. Then, he realizes that the stories are all over a year old. He no longer trusts how update any of the information is on this website. From now on, Oliver decides to rely on Google search, email blasts, and the address book in his email that he's been building up.

TASKS	
Why CMU?	
Campus Information	
Curriculum	
Degree Information	✓
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Student Profiles & Projects	✓
Faculty Profiles & Projects	✓
Illustrious Alumni	
CSD Events & Calendar	✓
News	✓
Press Releases	
Contact Information	✓

profile: Derek

User Group: Faculty
Gender: Male
Age: Early 40's

Derek is a professor in the Computer Science Department where he researches machine learning. Prior to teaching, he worked in the field for a number of years. He doesn't like to talk about his specific age. He understands the algorithms before social networks, but he is un-familiar with how to use a social network.

Motivations Behind Tasks

Derek comes to the website to find phone numbers of other faculty and the administrative staff. He enjoys reviewing his profile and information on his research. He also looks for news stories that feature him or any of his students. Derek has a bit of a competitive edge. As a result, he's also interested in reviewing what research projects the other faculty are working on and he pays particular attention to when they are featured in news stories.

Issues He Encounters

Derek comes to the website to find another phone number. and he pulls up the Grad Student Directory to find. He wonders why the faculty and administrative lists are not also referred to as directories? Oh well.

As the phone is ringing, Derek tries to search for the project his student is working on. He clicks on Student Research and is disappointment to find that it is only instructions on how to do research. With some more searching, he finds that the only way to find his students is to navigate to his own profile and then to his website where he lists the projects he is guiding. Derek sighs. Google can probably find it, but why isn't the CSD not showing off how amazing his student is (and he is for teaching them)?

Then, Derek is annoyed when he realizes that he has to go through the same pain-stackingly-specific search to see what others in his department are up to. Derek decides he no longer cares, and closes the webpage as the grad student answers the phone.

TASKS	
Why CMU?	
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News	✓
Press Releases	
Contact Information	✓

profile: Anna

User Group: Press
Gender: Female
Age: 30's

Anna lives is New York where she works as a journalist for Forbes.

She covers their technology beat.

Motivations Behind Tasks

Anna is a busy woman who is working on a deadline. She wants to get in and out fast. She is most interested in reviewing press releases and finding the contact info for media relations. If she has a story in the works, she may skim the faculty and student profiles for background research. Always in a hurry, Anna prefers to use a search bar for her answers rather than navigating through endless links.

Issues She Encounters

Anna is annoyed when she reaches the website because there is no search bar that she can use to find the answers she needs. Skimming through the links, the only things that looks remotely related is the news story feed. Anna askims the profile of a faculty member for her article. After which, Anna accidently finds her way to the School of Computer Science's website.

On the SCS's website she is having more luck. Under News and Events she finds both press releases and media relations. Sadly, they are not on the same page. She navigates to the first option, gets, her information, and navigates back out. Anna leaves shortly after.

TASKS	
Why CMU?	
Campus Information	
Curriculum	
Degree Information	
Jobs Outlook	
How To Apply	
Deadlines	
Transfer Credits	
Financial Aid	
Cost	
Extracurriculars	
About Pittsburgh	
Student Profiles & Projects	✔
Faculty Profiles & Projects	✔
Illustrious Alumni	
CSD Events & Calendar	
News	
Press Releases	✔
Contact Information	✔

profile: Huan Yi

User Group: Administrator at Competing University
Gender: Female
Age: 30's

Huan Yi works as an administrator for MIT's Computer Science Department. She absolutely loves dynamic grid layouts and never-ending scrolling pages.

Motivations Behind Tasks

Huan Yi has a full day ahead of her. MIT is a aggressive university where time is money. She is coming to the website to see how her school is stacking up against the competition. She is looking at the visual design of our website and the information architecture. She'll also take a peek at our curriculum and degree information to see if anything has changed.

Issues She Encounters

Huan Yi skims past the photo of a robot kicking a ball. She snickers when she sees that the latest news story is referencing an award for 2012. So out-of-date. She clicks into each of the programs and is surprised that more information isn't available upon the first click. Of course, as she adjusts her window size, only the paragraphs change with the movement. The PhD illustration get covered up by the enclosing window. Are they not aware of cell phones and tablets? Huan Yi decides that MIT has nothing to worry about. The website hasn't changed. An out-of-date website shows an out-of-date computer science program. Plus, who can beat a dynamic grid layout? She'll worry when CMU upgrades to a dynamic grid layout of their own.

TASKS	
Why CMU?	
Campus Information	
Curriculum	✓
Degree Information	✓
Jobs Outlook	
How To Apply	
Deadlines	
Transfer Credits	
Financial Aid	
Cost	
Extracurriculars	
About Pittsburgh	
Student Profiles & Projects	
Faculty Profiles & Projects	
Illustrious Alumni	
CSD Events & Calendar	
News	✓
Press Releases	
Contact Information	

conclusions

If a website is a conversation that the site visitors start, then the Computer Science Department is talking over them loudly.[1]

Jordan Harrison and Jennifer Landefeld has stated that the priority of the CSD website is recruitment. Therefore, the user groups that are the primary target audience for the website should be prospective students, their parents, and any directly influencing factor that makes the program more attractive -- an outside circle.

When looking at how easily this outer circle is able to access information on the website, versus how easily current students and faculty members (aka the inner circle) is able to access information on the website, it is clear that the CSD website is failing to reach these critical users.

This disconnect is apparent when we ran the personas through real-life scenarios. Every single persona ran into issues trying to complete the tasks they set out to do. The persona that had the easiest time of this was Sara, the prospective PhD, who had minimal problems with finding her program information but was unable to find much about how the program stands out from its competitors, which includes information about CMU culture, campus life, and the city of Pittsburgh.

We have determined

- **The CSD cannot reach the people they want to reach**
  The website fails their content objectives by not reaching their target audience

- **Users can't find what they are looking for**
  Users are confused by the navigation because the architecture does not adequately guide them to the information they want.

By laying out our research through our personas, we are able to approach the redesign of the website through a user centered analysis. This sets the foundation for our process for the rest of this project. After all, we are creating the website for the users. Why not let them have a say in it?

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[1]"Every use of your web site or mobile app is a conversation started by your site visitor." (Redish 2)

PRIMARY USERS

TASKS	Prospective Undergraduate Andrew	Prospective Undergrad Transfer Emma	Prospective Masters Tim	Prospective Ph.D. Sara	Parents Mr. & Mrs. Lee	Industry Lucas
Why CMU?	✔	✔	✔	✔	✔	
Campus Information	✔	✔				✔
Curriculum	✔	✔	✔			
Degree Information			✔	✔	✔	
Jobs Outlook			✔		✔	
How To Apply	✔	✔	✔	✔	✔	
Deadlines	✔	✔	✔	✔	✔	
Transfer Credits		✔			✔	
Financial Aid					✔	
Cost	✔	✔	✔		✔	
Extracurriculars	✔	✔				
About Pittsburgh	✔	✔	✔	✔	✔	
Student Profiles & Projects			✔	✔		✔
Faculty Profiles & Projects				✔		
Illustrious Alumni			✔	✔		
CSD Events & Calendar						
News						
Press Releases						
Contact Information	✔	✔	✔	✔		✔

SECONDARY USERS

TASKS	Alumni (Alex)	Current Students (Trish)	Current Masters (Aleem)	Current Ph.D. (Oliver)	Faculty (Derek)
Why CMU?					
Campus Information					
Curriculum		✓			
Degree Information		✓	✓	✓	
Jobs Outlook					
How To Apply					
Deadlines				✓	
Transfer Credits					
Financial Aid		✓	✓	✓	
Cost					
Extracurriculars					
About Pittsburgh					
Student Profiles & Projects	✓			✓	✓
Faculty Profiles & Projects	✓	✓	✓	✓	✓
Illustrious Alumni	✓				
CSD Events & Calendar		✓	✓	✓	✓
News	✓	✓	✓	✓	✓
Press Releases					
Contact Information		✓	✓	✓	✓

TASKS	Press Anna	Competitors (Universities) Huan Yi
Why CMU?		
Campus Information		
Curriculum		✓
Degree Information		✓
Jobs Outlook		
How To Apply		
Deadlines		
Transfer Credits		
Financial Aid		
Cost		
Extracurriculars		
About Pittsburgh		
Student Profiles & Projects	✓	
Faculty Profiles & Projects	✓	
Illustrious Alumni		
CSD Events & Calendar		
News		✓
Press Releases	✓	
Contact Information	✓	

APPENDIX II: WORKS CITED

Blume, Lenore. "Transforming the Culture of Computing at Carnegie Mellon." Computing Research News Vol. 13/No. 5 (Nov. 2001): 2, 7. Print.

Redish, Janice. *Letting Go of the Words: Writing Web Content That Works.* 2nd Ed. Waltham: Elsevier, 2012. Print.

Carnegie Mellon University Student Life. US News and World Report LP, 2014. Web. 08 February, 2014. <http://colleges.usnews.rankingsandreviews.com/best-colleges/carnegie-mellon-university-3242>

School of Computer Science Fact Sheet. Pittsburgh: Carnegie Mellon University Office of Admissions, 2013. PDF.

Report of the Diversity Advisory Council: Annual Report, January 2013. Pittsburgh: Carnegie Mellon University's Diversity Advisory Council, 2013. PDF.

Page ID	Page Title	What's going on?	What's funky?	What is the content currently achieving?	Current User Group
0.0	Home Page	---	---	---	---
1.0	General Info	header on homepage	---	---	---
1.1	History	There is a "Vision", "Mission", "Distinguishing Chararacteristics", and "History' statement; which are all able to be clicked and take the user to a further description.	This subtitle is called History, but the URL says "About"	Department Identity	general
1.1.1	Vision	goes into the fundamentals of Computational Thinking by Jeannette M. Wing.	While interesting, I'm unclear how this immediately relates to the CSD.	---	general
1.1.2	Mission	Short mission statement	Not sure why this warrants its own page	---	general
1.1.3	Distinguishing Characteristics	what makes CMU stand out	Lots of telling, not showing. Too long, needs scannable subtitles.	---	general
1.1.4	History	Actual history.	---	---	general
1.2	News Page	Page of outside links to SCS news.	Goes to SCS news, should go to CSD new and external link to SCS	---	general
1.3	Faculty Positions Available	there is a link to "teahing track" and "Mark Stehlik Postdoctoral Teaching Ferllowship". It also gives a brief description of what they are looking for and what all is included in the school.	there is no list of faculty positions available. And everything is in bold.	department identity	prospective faculty
1.3.1	Teaching Track Opportunities	The page first says there are "two teaching-track positions", what two they are I am not sure. It then goes into requirements and outcomes. It also mentions tenure-track and that "not a good match for teh needs of this position".	too much information given and not easy to scan.	what is needed to apply	prospective Assistant Teaching Professor who dreams to be an Associate Teaching Professor and Teaching Professor
1.3.2	Mark Stehlik Postdoctoral Teaching Fellowship	information about the fellowship	not enough information about the fellowship	what the application requirements are	prospective fellowship applicants
1.3.3	Submit your application	lists of 1. application material 2. core areas 3. background in the following areas	I think the "core areas" are what the applicant should know - when I read this I thought it meant the different departments.	what is necessary for the applicant to have	prospective faculty for tenure track and reasearch track
1.4	SCS Calendar	tab in top right that says "departments & offices". List of events that are SCS related. Each event is chatagorized into: seminars, talks, thesis proposals, special events, project presentations, video, conference/ workshop. This page is hosted by SCS.	tab in top right that says "departments & offices" when I click CSD it takes me to the CSD homepage - I would think it would just show me the CSD calendar events.	list of SCS events	faculty and students
2.0	Education	header on homepage	---	---	---

[1]Columns not shown: URL, Needs Updating, Is the Content Reaching Its Target Users?
[2]Rows not shown: Page ID 2.1 through 6.0