

Kevin Vigneault
Professor Allison Druin
LBSC708N
12 December 2011

Designing a Question & Answer Tool for First Generation College Students

Alex Garcia, Kevin Vigneault, Rajan Zachariah, Zahra Ashktorab

The goal of this project is to explore design ideas for establishing a supportive community for first-generation minority students at the University of Maryland. After a four-week, user-centered design process, our team developed a set of design comps for a question and answer forum that would provide students an anonymous platform to ask any questions and receive a guaranteed response. Our process involved conducting background research about the problem space and validating that information through user interviews with first-generation students. After the research phase of the project, we worked through a design process that involved parallel design, wireframes, style boards and mockups of the product's final visual design. These designs were presented to university students in order to gauge reaction and inform next steps that could be taken with the product. This paper details the aforementioned steps and presents the design artifacts our team generated along the way.

Research & Concepting

Before generating product concepts, our team explored online resources targeted at first generation college students (FGCS); specifically looking for insights into the problems that FGCS face. Often, the resources we found provided advice about how best to handle the challenges of college as a FGCS. A trend emerged while performing this preliminary exploration; many of the resources advised FGCS to not be afraid to ask questions. For example, the official Rasmussen College Website specifically advises FGCS to "never be afraid to ask for help from peers, your instructors, and your college's support staff" ("Rasmussen College"). Similarly, a first generation student at the University of Central Oklahoma stated in an online interview that "(e)verything is possible if you just put your mind and heart into it. Even if you are a first generation college student like me. Don't be afraid to ask for help!" ("CollegeBoard").

In the interviews we performed, we gathered further insight about why FGCS may need to ask questions regarding the college experience more often than non-first generation students. One of the interviewees remarked “I didn’t have anyone there to teach me how college was going to be. I was going off what the movies told me. And it wasn’t accurate at all.” This statement suggests that as a first generation student, the interviewee did not have the support network in place to handle all the complicated problems a student faces while going through college. The lack of a support network is also a theme present in the research data provided by Karen Holtzblatt.

Advising students to ask lots of questions is not necessarily advice given specifically to FGCS. However, we discovered there may be a reason why this advice is more often specifically targeted at FGCS. In a study published by the Journal of Multicultural, Gender and Minority studies that compared first and non-first generation college freshman, it was found that “FGCS generally do not ask questions and/or seek help from faculty members and support staffs” (Jenkins, Miyazaki, and Janosi 6). Natalie Solverson, an admissions counselor at the University of Wisconsin La Crosse, supports this on the university’s official website by stating that “(a)s a first generation college student I was afraid to ask questions” (“University of Wisconsin La Crosse”).

Based on our background research and interviews which suggested that FGCS both need to ask more questions from the university community and are more averse to doing so, our group decided to design an online question and answer forum for FGCS at the University of Maryland.

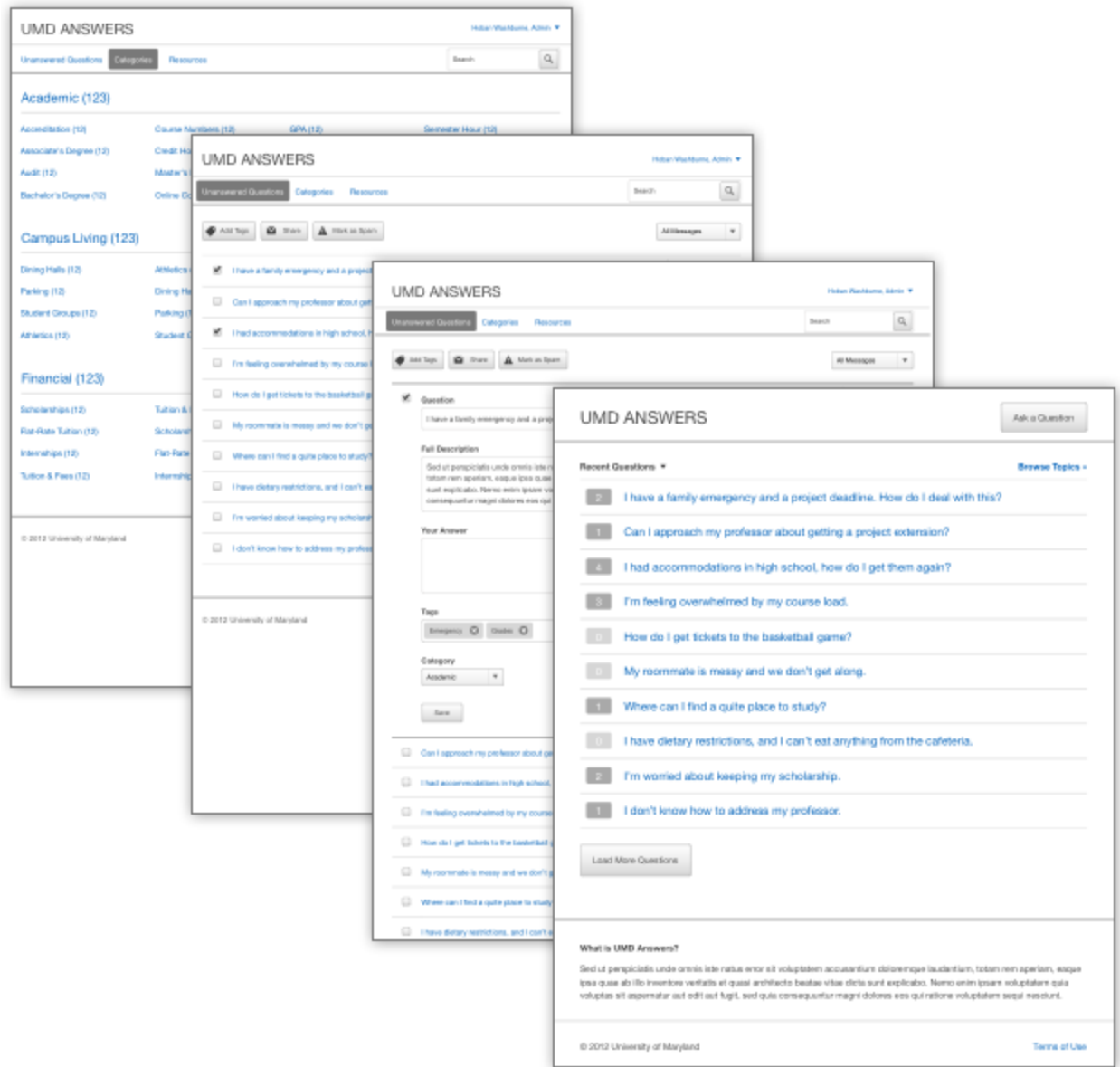
Design Concepts

After settling on a general direction for the product and discussing its high-level requirements, the group split up to independently generate design concepts for what would eventually become UMD Answers. We chose a parallel design approach in the early stages of the project because it is an “excellent way of generating a wealth of design ideas quickly” (Myles). The group met to share, discuss, and evaluate each of the mockups we created. The purpose of this exercise was not to pick a winner amongst the group. Instead, we used each of the design concepts as a starting place to discuss the underlying rules (shown below) that would govern the system.

<ol style="list-style-type: none"> 1. Questions should be anonymous 2. Questions can be rated 3. Questions should be categorized 4. Questions can be tagged 5. System should minimize duplicate tags 6. System should be able to relate questions 7. System should minimize duplicate questions 	<ol style="list-style-type: none"> 8. Questions are searchable 9. Answers are not anonymous 10. Answers could be rated 11. Answers are not indexed 12. Questions can be marked as answered 13. Answers could be accepted 14. Users earn points based on answers
--	--

Wireframes

After sharing and discussing our individual design concepts, we moved on to refining the product's interface; using Omnigraffle to generate high-fidelity wireframes. During the wireframing stage, we fleshed out specifics of the interface such as button labels, form elements, and navigation. We also started to incorporate representative sample content to give the designs a more authentic feel that we felt would be important when later gauging reaction to the designs from students.



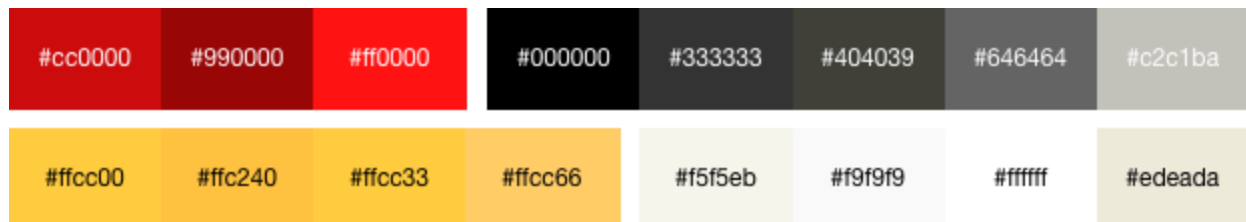
Visual Design

At the same time as we were creating the wireframes that defined the layout and functionality of the design, we also started to define the visual and brand identities of the product. The name of the product, UMD Answers, was introduced during the parallel design phase and was chosen by the group because it signifies that the community is specific to the University of Maryland. We decided not to brand the product in a way that identified it as specific to FGCS because we felt that singling out this community of students might be off-putting. We also did not want to preclude non-first generation students from participating

because their input could be very valuable to FGCS.

Colors & Fonts

Because the project guidelines state that our group was designing this product for the University of Maryland's President's Commission on Ethnic Minority Issues (PCEMI), we worked under the assumption that the visual identity of the product would follow the branding guidelines outlined by the University of Maryland. We used these guidelines to define the fonts (Bembo & Univers) and colors (shown below) we would use in the final design of UMD Answers.



Style Boards

Even though we constrained ourselves to using a limited set of fonts and colors, we still wanted to explore different directions. To do so, we created three distinct style boards; sometimes called mood boards or inspiration boards. This is a technique that is “extremely useful for establishing the aesthetic feel of a web site” (Wagner) without getting bogged down in the specifics of the layout and functionality.



The first of the three style boards was designed to be most similar to the overall look and feel of the current University of Maryland website. This direction featured a bright red header, a

black page background, and white content area. It is the only direction of the three explored that combines both reds and yellows; a color combination that is distinctive to the state of Maryland. The second board utilizes both light cream colors and shades of red to create a feel that is less aggressive than the other two. This board includes lots of heavily rounded elements and overall, has a more feminine aesthetic. The third board is very distinct from the other two in that does not include any reds and the main elements of the page are set on a dark background; rather than a light one. The overall aesthetic of this board is more masculine and it is the least in line with the current set of University of Maryland web properties; though it does fulfill the requirements of the brand guidelines.

The team met to review the three style boards and we discussed which design elements would be most appropriate for the audience we were building our product for.¹ The overall consensus was that the first direction looked too official and that might be a turn off to students. We want the product to have a somewhat informal and approachable feel and to do so, we want to slightly distance our design direction from the overall aesthetic of the university. The second direction stood out as the overall favorite of the group because it came across as the most approachable. However, elements of the third style board, such as the logo font and button treatment, appealed to the group. The final decision after reviewing the style boards was to create a hybrid of the second and third design directions.

Design Comps

Because the wireframes nailed down the layout and the style boards established the visual direction of the product, moving on to full design compositions was a straightforward, painless process. The creams and whites from the second style board acted as the primary background for the pages, while the dark gray header and logo font was pulled from the third board. At this stage; some textures, gradients, and shadows were added to give the design some interest, but overall we attempted to not overdo it. The complete set of design comps can be viewed at the following website: <http://dl.dropbox.com/u/5420687/HCIM/FinalProject/index.html>

¹ Had this been a real exercise, we imagine that at this stage we would have presented the design directions to our stakeholder, the PCEMI. However, because of the hypothetical nature of the project, we essentially acted as our own stakeholders and voted on the direction ourselves. It should also be pointed out that due to time constraints, we were not able to involve end-user feedback at this stage - though we were able to gauge student reaction to our designs later in the process.

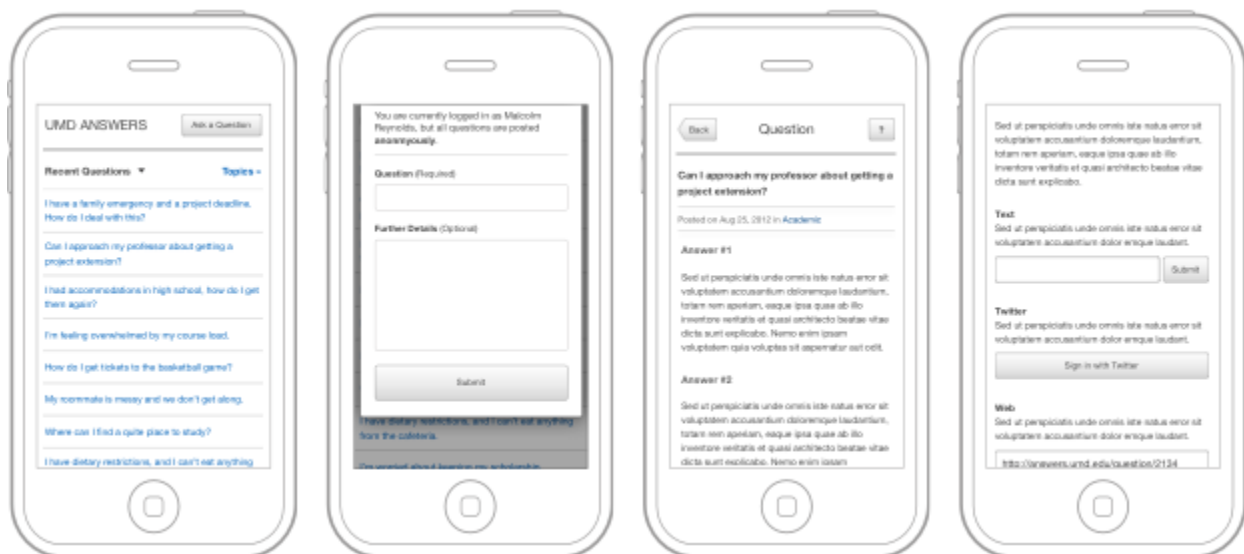


We purposely omitted any stock photography or other contrived design elements in order to maintain the authenticity and simplicity of the product. By some standards, our design may be concerned boring, but it is our opinion that the design we generated for UMD Answers is appropriate for what we were attempting to accomplish.

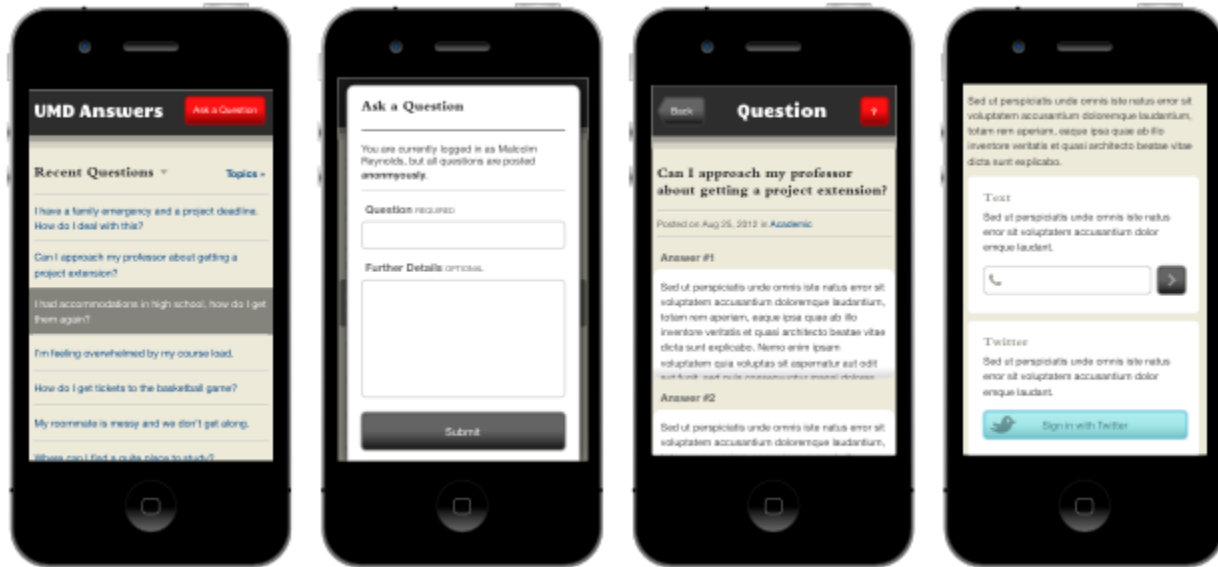
Mobile

57% of college students in the United States currently have smartphones (Smith) and from all indications, this figure will continue to rise. During our user interviews, we anecdotally

confirmed that FGCS also have a high likelihood of owning a smartphone. Because of this, our team constantly discussed how the product would be used on mobile devices. We concluded that our main objective on these devices should be to make asking questions as quick and painless as possible. We envision that students often have questions many times throughout the day when they are not using their computer or laptop; such as walking between class, eating at the student center, or riding the shuttle. A mobile interface for our product would allow students to ask questions at the moment the question is conceived; increasing the likelihood of our product being used. The wireframes below show some of the page layouts designed specifically for presentation on smartphones, such as iPhones and Android devices.



The same styling that was applied to the full-size website was also applied to the mobile wireframes to generate a set of visual comps.



In addition to receiving questions from mobile devices, we also considered how users would be alerted when answers to their questions were posted. Because we envision the mobile presentation of the product to be HTML-based, rather than a native application, we could not rely on the application itself to push notifications to the users phones. Instead, we decided to rely on both text and Twitter messaging to push notifications to our users with links back to the page containing the answers to their questions.

Testing & Next Steps

With the initial set of design comps complete, we reached back out to FGCS to gauge reaction to the product. We carried out four individual user interviews where we shared our designs along with a brief description of the intended use of the product. The responses ranged from very specific critiques of the user interface to more insightful remarks about privacy and how the students felt social networking features should be integrated. In terms of the visual presentation, we received feedback that the design might be a little too “muted”; one of the respondents had a preference towards a more vibrant set of colors. We also received feedback that the buttons should appear flatter. It is tough to jump to any definitive conclusions based on these types of specific preferences because they are heavily based on users’ personal tastes. As a next step, our team could make a series of visual tweaks to the comps and either continue with one-on-one interviews or conduct focus group to see if the design changes positively or

negatively affect users' reactions to the product.

Ultimately, the only way to tell if a product will actually be successful is to release it into the wild. As a next step, we would build a working version of the application that allows users to perform the primary actions of asking and receiving responses to questions. Assuming the product is used by a non-insignificant number of people, it would be insightful to study the kinds of questions that are being asked. While we gathered some insight about how the product might be used during the research phase of our project, we'll never quite know how real people will use it until they are using it in real scenarios.

Works Cited

. "Life As A First-Generation College Student." Rasmussen College. N.p., 22 Nov 2011. Web. <<http://www.rasmussen.edu/student-life/blogs/college-life/life-as-first-generation-college-student/>>.

. "Breaking Barriers: Student Voices, Olivia Saldana." CollegeBoard. N.p., n.d. Web. <<http://advocacy.collegeboard.org/college-keys-compact/breaking-barriers-students/olivia-saldana>>.

Jenkins, Anthony, Yasuo Miyazaki, and Steven Janosi. "Predictors that Distinguish First-Generation College Students from Non-First Generation College Student." *Journal of Multicultural, Gender and Minority Studies*. 3. (2009): 6. Web. 10 Dec. 2011. <<http://www.scientificjournals.org/journals2009/articles/1429.pdf>>.

. "Meet the Administrators." University of Wisconsin La Crosse. N.p., n.d. Web. <<http://www.uwlax.edu/admissions/html/meetthecounselors.htm>>.

Myles, Mike. "Using a Collaborative Parallel Design Process." UXmatters. N.p., 5 Apr 2010. Web. <<http://www.uxmatters.com/mt/archives/2010/04/using-a-collaborative-parallel-design-process.php>>.

Wagner, Mindy. "Why Mood Boards Matter." Webdesigner Depot. N.p., 30 Dec 2009. Web. <<http://www.webdesignerdepot.com/2008/12/why-mood-boards-matter/>>.

Smith, Josh. "How College Students Use Smartphones." Gotta Be Mobile. N.p., 10 Dec 2011. Web. <<http://www.gottabemobile.com/2011/12/10/how-college-students-use-smartphones-infographic/>>.