

Designed by: Kristyn Raleigh, Morgan Jones, Brian Thompson, Scott Johnson

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Kristyn Raleigh is a senior finishing up her concurrent degree in Computer Information systems and Marketing. She has spent her time at ASU involved in many groups including the sorority, Gamma Phi Beta, and a few clubs including Beta Alpha Psi (a business honors fraternity for Finance, Accounting, CIS, and BDA majors), American Marketing Association, and DISC. She has also had work experience including two years as an Apple iOS Technical Advisor and interned for Ford Motor Company over this past summer in their marketing and sales department. In her spare time she enjoys reading, hiking, kayaking, and snowboarding.



Morgan Jones is a student at Arizona State University pursuing a degree in Computer



Information Systems. He has over 10 years of experience working in Information Technology. His professional journey has taken him from entry level help desk work to senior system administration and architecture for small and medium business up to large academic institutions. Current projects include architecting hyper converged virtualized datacenter environments as well as extending on premise data centers into the cloud. When not at work or attending classes he can often be found training for his next marathon. He has run 16 full marathons and 22 half marathons in 3 years of running.

Brian Thompson is a student working towards his Bachelor of Science in Computer Information Systems at Arizona State University. Prior to going to University, Brian was an Airborne Cryptologic Language Analyst for the United States Air Force, as well as a technical support and sales specialist for GoDaddy. Growing up around computers, Brian developed a passion for nearly anything technology related, and has always shown a passion for learning new things in the technology field.





Scott Johnson is a senior majoring in CIS at the W.P. Carey School of Business at ASU. He has a strong work ethic and has developed good leadership skills from his time in the Boy Scouts of America. He methodically tackles problems and finds the most efficient way to solve them. He is also very adaptive and can easily change things on the fly which allows him to dedicate as many resources as possible to the team and project.

Our Vision:

Imagine the ultimate group project tool that incorporates the functionality of project planning software collaboration from your group members, allowing you to easily find time to meet, and even a way for your professor to check up on you or even grade your work from it. This tool will combine aspects such as designating Project Lead, working together on files, setting milestones, chat functionality and even submission sections for when milestones are complete.

This app would primarily target college students. Our plan would to launch and really promote it at one University. It would be available for download everywhere but it would be optimized for one specific University in order to make sure everything works seamlessly and tailor it to that University. After that we would expand to other universities who use a similar structure. For instance if we launched at ASU the next target may be a school that also uses Blackboard or similar class structures. Ultimately this would be a tool professors would want there students to have for group projects and could be used in many classes at once but keep everything separate and organized. The launch of the app would progress from there until it could be used in all schools.

Design:

Our plan from the outset was to design either an application, website, or combination of both for people to be able to organize all of their class project information and collaboration all in one space rather than use many different applications to handle the task. Though Google has a vast array of web applications that fulfill a variety of needs, they are not fluidly connected enough nor organized enough specifically for group projects like those handled in universities such as ASU. Additionally, there are next to no tools available for collaborating on scheduling or anything that integrates with a Project Lead or Professor-led style format.

In our initial designing of program we decided to do mock-ups for a mobile app-driven program with some basic concepts of the functionality. This included areas such as setting up a basic account/registration form, setting permissions for group projects/designating group leaders, designing a chat function, providing a file management solution, as well as a group calendar that allows everyone in a group to be on the same page as well as list everything each individual needs if they are in multiple group projects at once. With this being the basic design phase we didn't get too in depth with our mock-ups, just providing the bare necessities to figure out what we would need further down the road.

As we went through discussing what all we wanted on screens we discovered that there was additional functionality that may prove useful, as well as help set the application apart, a group finder. One of the big problems people face when starting a group project is actually finding a group, figuring out what skills are necessary and who has those skills is next to impossible in typical classroom settings where students just ask the people next to them to form groups. With a group finder we could allow people to set up profiles that give basic background information on themselves such that people have more information to work with when deciding who to collaborate with.

Development:

The group agreed that the best delivery of this application would be on mobile devices. We built a prototype of the application using Twitter Bootstrap. Bootstrap is an HTML 5, CSS, and JS framework for building mobile first web applications. The magic of bootstrap is the developer can build their website and it will responsively scale for any size screen it is viewed on. Another advantage of using bootstrap is that we did not have to purchase any development tools. We were able to build the prototype using the simple text editor Notepad++. Lastly, another major reason we went with a bootstrap web page is that we could quickly make changes and upload them to a web server to see our changes instantly. This allowed for a collaborative effort as well because one group member could work on a section of the product

while other members worked on others. If we were using native mobile OS applications for Android or iOS we would have needed devices unlocked for development which would have been cost prohibitive for the group.

Due to the time frame of our development sprints we choose to focus on the user interface of the application. Future development of the project would require building a backend database to store user information and create functionality. Once final feature are decided on it would also be ideal to port the application to the native application languages for iOS and Android. This would allows access to notification and Storage APIs on each device platform. We completed several screens which can be seen below.

User Feedback:

Over the course of the project we gathered a large amount of consumer feedback to improve our design and prototypes. We found this to be extremely helpful and helped improve our overall interest of our app over time. After coming up with the idea and a few mock ups we had 63.7% of users interested. We found out the main reason for the low number was because of the actual design itself. Many users found it unattractive. We then did three different designs and had users choose which one they liked best. From there we took the selected design and came up with our final prototype which was explained above and has screenshots below. After the redesign now 78% of users were interested in our app. We also were able to throw out a few useless features of the app that were not popular among users tested. Along with throwing out features we also incorporated new ones that users said they were missing from current group project type softwares.

Conclusion:

Overall we found that this app design was a successful idea. If time permitted we could have developed it much further. We learned how to incorporate user feedback what to listen to and what we decided was best. The app increased interest week after week. We measured the success of the project based on, the percentage of respondents that said they would use the app when in full commission and the percentage of respondents that signed up to receive information upon release. The next steps to make this app a reality is a considerable amount of user testing and integrating updates. We would also put in the full integration of the app features as opposed to the static pages currently. Once those were in place it would be ready to launch. Like mentioned earlier we would do the launch in an iterative process and focus on one university first, then go to like universities, and finally a hard launch to everyone.

Appendix

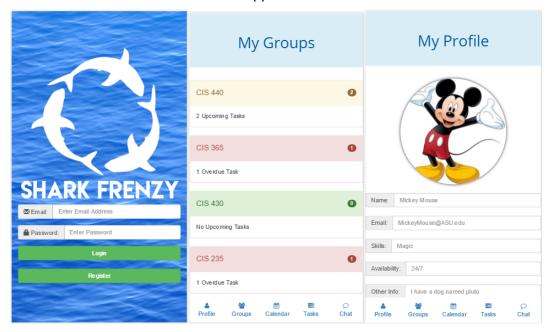


Figure 1. Login Screen

Figure 2. My Groups

Figure 3. My Profile

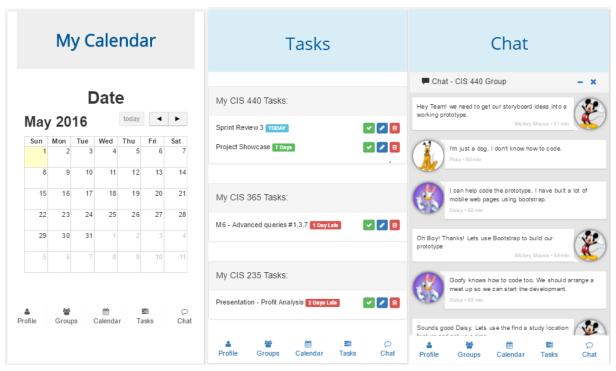


Figure 4. Calendar

Figure 5. Tasks

Figure 6. Chat