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Dis 1A

CS 188 HW 4

Website: Piazza

Part I: Evaluate the existing site

| User | Task | Mistakes | Questions | Time taken | Keystrokes | Comments |
|------|------|--|---|--|------------|--|
| 1 | 1 | Summary doesn't restrict to 100 characters Clicking on text editor, can only click top line to start typing, nowhere else on the white box Pressed cancel to delete post but doesn't delete it | Who created the various post folder options? And what are they used for? Why is post type background white? Why is preview post all the way in the bottom corner? Is there a need for both plain and rich text editor? | 1 minute, depending on how long they take to write and read the screen | 7 | Very cluttered/too much going on No obvious way to delete draft post, hidden button Under drafts it shows <p> and </p> but users don't need to see the html Save draft to draft saved is a quick change |
| | 2 | Struggled to delete post Submitted post and realized there was typo Can submit blank comments | What is follow up discussion for? Why are some questions red and some are black? How do I find posts I favorited? Is the question history dragger necessary? Why is it called wiki answer? | 30 seconds | 4 | Shouldn't let users be able to to other peoples' questions Make a scroll instead of drag bigger text box Actions button not as noticeable and has weird options Is there a way for one user to add multiple comments? Confused on function |

| | | | | | | |
|---|---|---|--|--|---|--|
| | | | What does the zero refer to at the bottom of a post? | | | <p>of good question and thanks buttons</p> <p>Be able to search with multiple filters on at once</p> |
| | 3 | <p>Could not find messaging/email location for a long time</p> <p>The speech bubble symbol in the top right corner looks like messaging</p> | Why is messaging the instructor individually considered a “new post”? | 15 minutes | 7 | Posting to the class and messaging professors should be different parts |
| | 4 | <p>Press enter button with search company bar but does not work</p> <p>Could not find connect button because does not fit within screen</p> <p>Did not know whether to search up a person or search up a company</p> | <p>Why does piazza have both class discussion posts and company postings?</p> <p>What are all the symbols on a person’s profile mean?</p> <p>Is there a way to message companies?</p> <p>What is TA vs TS next to list of classes?</p> | 3 minutes | 6 | Another person’s profile screen does not fit on a mac |
| 2 | 1 | <p>Forget to select a required folder to categorize the posted question</p> <p>Accidentally show personal name when posting question, instead of anonymous to classmates</p> <p>Confusing buttons. Two duplicate preview buttons; one located along the text editor bar</p> | <p>Is it necessary to distinguish between a question or a note?</p> <p>How useful is the Latex Equation Editor?</p> <p>Is it requiring the user to put in too much effort when typing the mathematical equations, instead</p> | Roughly 2 minutes; it depends on the length of the questions | 6 | <p>Not necessary to differentiate between a question and a note</p> <p>Not necessary to differentiate between plain text and rich text when posting a question</p> <p>Not necessary to mention the summary/question title is limited to 100 characters or less</p> |

| | | | | | | |
|--|---|--|--|---|---|---|
| | | while one located next to the cancel post button | of a copy and paste functionality? | | | |
| | 2 | <p>Post, preview, cancel buttons are too small to be noticed</p> <p>After posting the question, there is no obvious button for deleting a post, except editing a post</p> <p>Confused of choosing between the options of posting as students' answer or posting a new followup discussion when it is the first answer post to the question</p> | <p>What is the meaning of the number display for each of the posted questions in the left side of search catalog?</p> <p>Why aren't all the posted instructor notes located at the top of the search list?</p> <p>How to specifically follow an interested post?</p> | 1 minute; depends on length and content of the answer | 4 | <p>Not necessary to display the question history bar since each post is already indicated with time and name of the student at the lower left corner</p> <p>Confused on how to set up class & email settings for following specific post of questions (required extra look up for instructions)</p> |
| | 3 | <p>Did not know what is the difference between making a new post and sending a message to the professor</p> <p>Cannot find an obvious button to send the message quickly without looking or searching through the navigation bar</p> <p>Mistaken the speech text logo at the top right corner as the sending message button</p> | <p>Why is messaging the professor considered as publishing a new post?</p> <p>How do you know if there is a reply from the questions you have sent to the professor?</p> <p>Why is the post type could include that you do not need an answer for the question?</p> | 10 minutes | 6 | <p>Create a new button that is dedicated for messaging the professor for the corresponding class</p> <p>The structure and the options for process of sending a question to the professor is too confusing. No obvious instructions</p> |
| | 4 | <p>After entering a search word in the text box and hitting the enter key, the search fails and shows up as blank page</p> <p>Try to click on the hint button on the lower left corner, but it is not</p> | <p>Why does the searching for company, student and events are group together in one navigation bar?</p> <p>Why does the</p> | 4 minutes | 7 | <p>The entire piazza network page does not fit on the page. Users need to further readjust the size of the screen</p> <p>There are no hints ,instructions and tabs</p> |

| | | | | | | |
|---|---|---|--|-------|----|--|
| | | <p>clickable and does not show up anything</p> <p>After clicking the email logo, do not find a button that allows to start a conversation with a specific person or company</p> | <p>screen does not allow for scrolling between left and right?</p> <p>Why does the functionality of searching for a company is being placed in a class discussion board?</p> <p>How can I directly message a specific?</p> | | | on how to minimize the search for companies and events |
| 3 | 1 | None | Why aren't there more "post types"... Like there are more than just questions and answers? | 30 s | 10 | Overall easy to post a question. |
| | 2 | None | Do I "start a new follow up discussion" or is there a more specific action to press? | 1 min | 5 | Ambiguity in which box the response should go and why my answer is a collaborative answer with other students. |
| | 3 | <p>Clicked in the wrong area...?</p> <p>Was not aware of the different buttons to click on.</p> | Do I post a question "to the professor"? Or is there a messaging area that I'm just not aware of. | 5 min | 5 | If there is a specific place to message the professor at, it's super hidden and I can't find it. |
| | 4 | Couldn't find where to go. | How do I get to a student at another company...? | 3 min | 10 | Had to be told where to go after not being able to find it. Very difficult to find. |
| 4 | 1 | Do not know which folder the new post or question should go | <p>What is the reason to indicate between a question or a note?</p> <p>Couldn't student or users choose to answer the question or not?</p> | 40 s | 7 | Remove unnecessary requirements such as selecting to post as question or note |

| | | | | | | |
|--|---|--|---|-------|---|--|
| | 2 | Not sure to type the response in the student's answer input box or the follow up discussion dialogue | Why is the student's answer input box is being prompted for a wiki answer? | 2 min | 6 | Add a direct delete button for a posted question Combine the options of student's answers and the new follow up discussion |
| | 3 | Cannot find a direct button to message the corresponding professor for the class | Why do I need to click the new post button in order to identify as sending a message to the professor | 6 min | 6 | Add a direct button for sending a question to the professor Remove unnecessary format setting such as choosing between plain text or rich text editor |
| | 4 | After typing the searched keyword and hitting the enter keyword, the searched result does not show up along the drop down list | Why does the searching for companies, student, and events | 4 min | 8 | Separate the main search box into three separate search bar for companies, students and events |

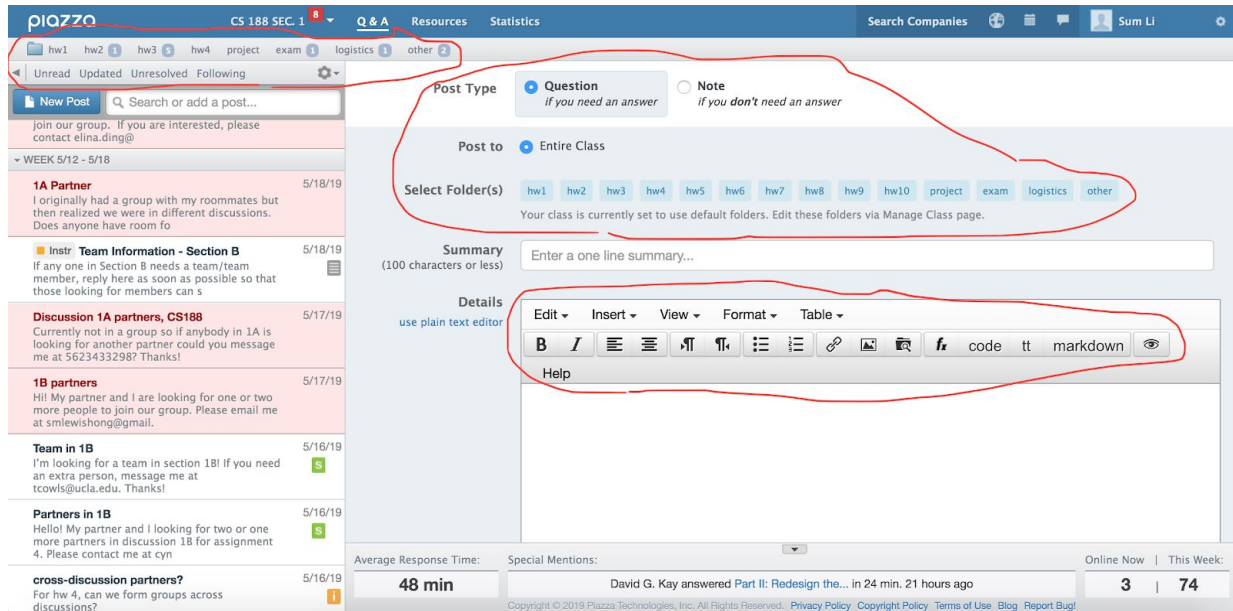
| Designing an Effective Link | Managing large Number of Links | Providing Orientation Information | Augmenting Link to Link Navigation |
|---|--|---|--|
| Action button on posts is not clear and noticeable; Action button only pops up if user hovers over post | Too many folder options for posts | Inability to find how to message the professor | No search/help section |
| Interface very cluttered | Confusion between students' answer vs follow up discussion | Some buttons can be bigger, more noticeable and clearer on function | Companies section vs class discussion section feel like totally separate websites and have different nav bars; Difficult to navigate back to the class section once in the companies section |
| Preview Post does not | Two duplicate | Inability to find how | There isn't a direct |

| | | | |
|--|--|--|--|
| look like a clickable link | preview buttons when constructing a post or a question | to start a conversation with a company on the piazza network page | link back to the homepage of the class discussion page, users are required to click the “utility” button and the drop down list shows the redirect button; User can also click the (x) button in the search bar to return to “All” questions |
| Confusion for good question and thanks button; No true purpose for both of the buttons | There are no shortcuts links or button for constructing a message or question for the professor | Inability to distinguish searches between companies, students, and events | There isn’t a browser history recorder on the page that keeps track of the visited companies and events |
| Some icons on navbar are unclear | Three duplicate buttons (“user’s name”, “profile completion” link, profile logo) that could lead to the user’s profile | Did not provide a site name or logo that distinguishes the class discussion page from the network page of looking up companies | The search bar of the network page often does not recognize the search keywords and does not list relevant results of each search |
| Profile of other students do not fit on mac screen so connect button can not be seen | | | |
| The hint logo at the search company page looks like a clickable link that confuse users | | | |
| Profile link is too small (in the same box as the Piazza jobs link); Viewing a profile should be | | | |

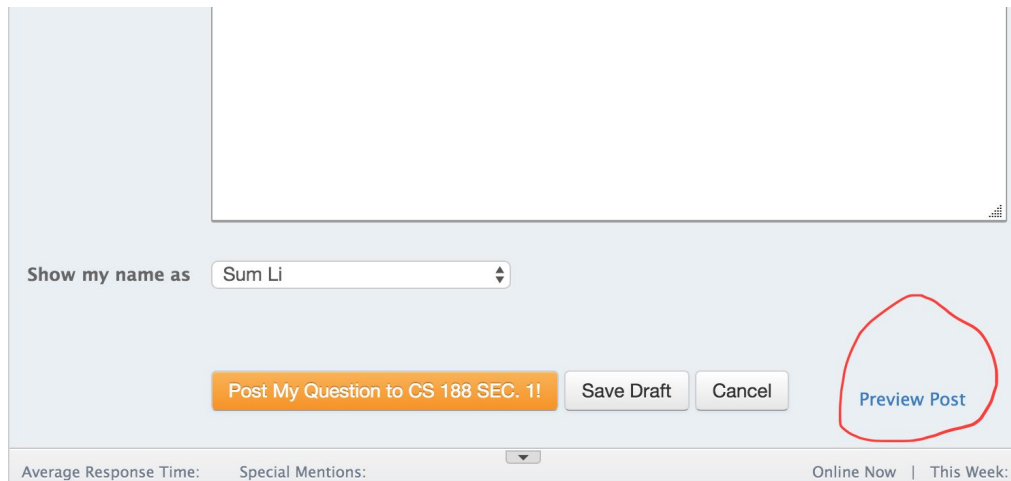
| | | | |
|----------------|--|--|--|
| more important | | | |
|----------------|--|--|--|

Designing an Effective Link :

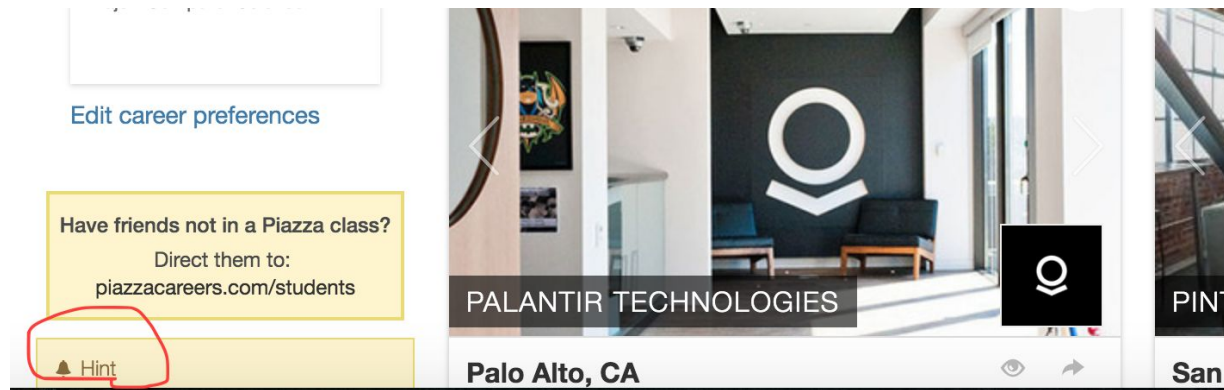
1. Cluttered Interface and unclear, small action buttons



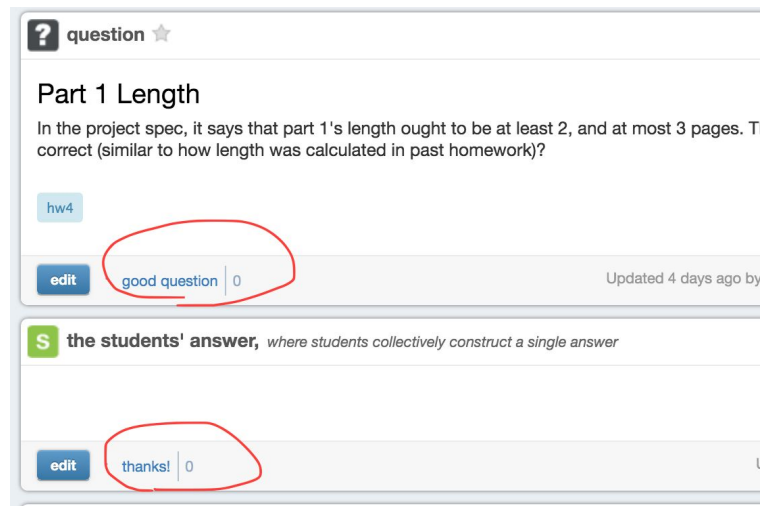
2. “Preview Post” does not clearly indicate that it is a clickable link



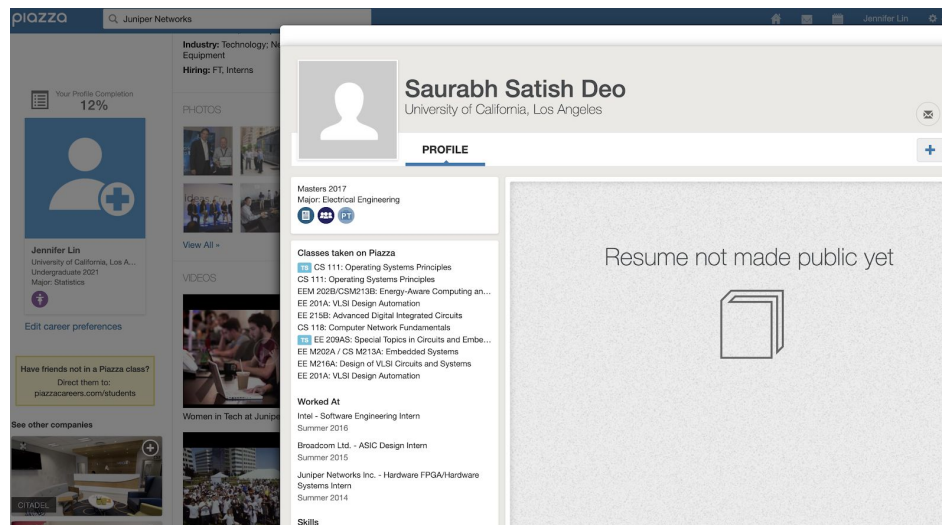
3. “Hint” does not does not clearly indicate that it is a clickable link



4. Confusion between “good question” and “thanks!”

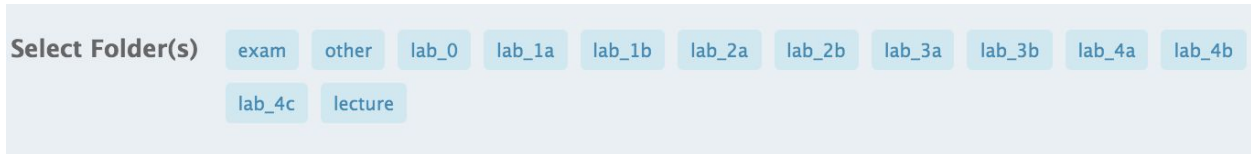


5. Profile of other students do not fit on mac screen so connect button is cut off on the right side

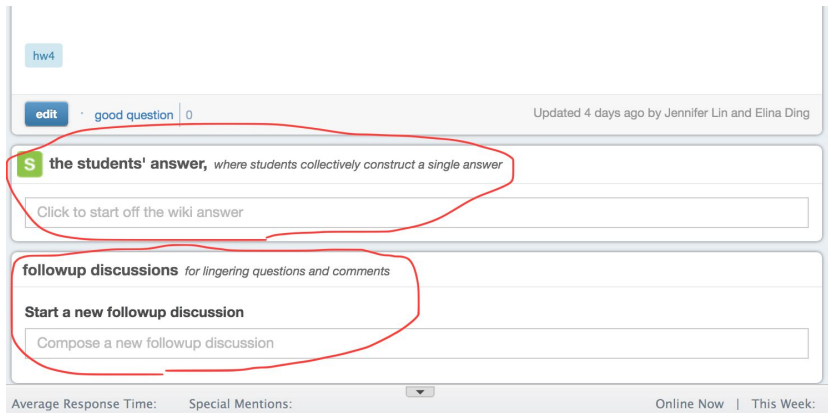


Managing large Number of Links

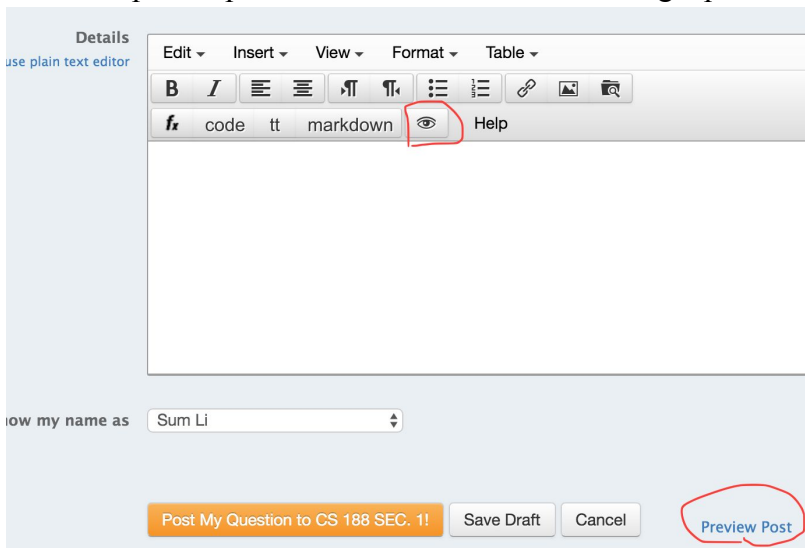
1. Too many folder options for posts



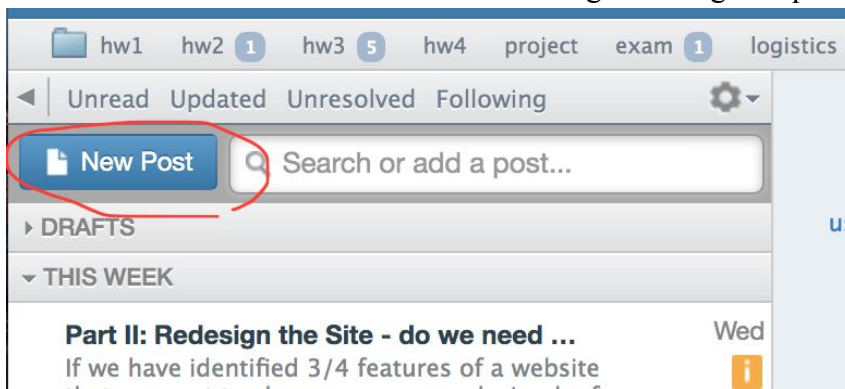
2. Confusion between students' answer vs follow up discussion



3. Two duplicate preview buttons when constructing a post or a question

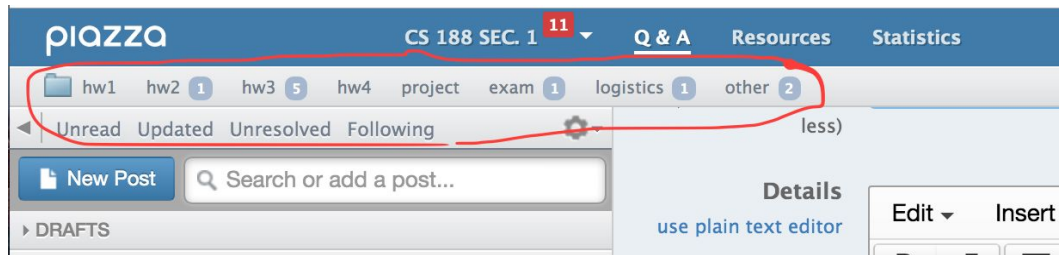


4. No shortcuts links or button for constructing a message or question for the professor

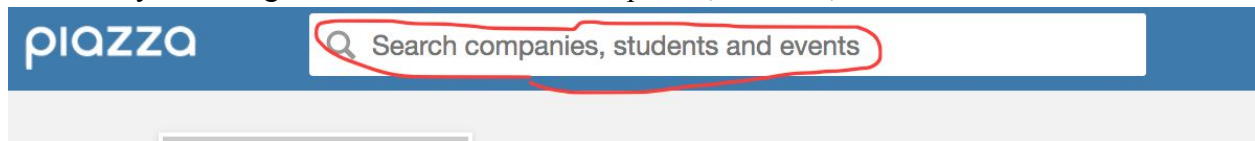


Providing Orientation Information

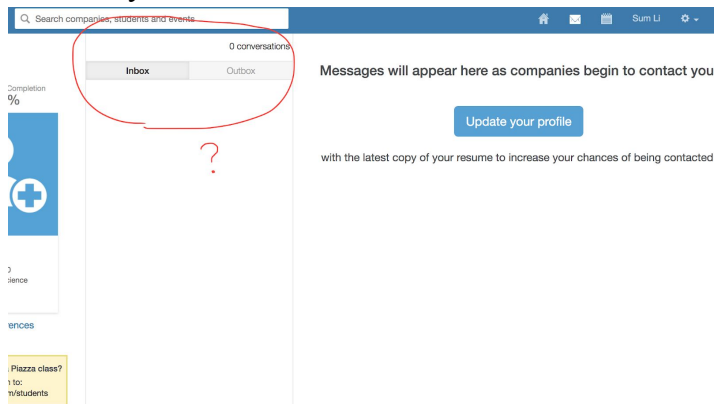
1. Inability to find how to message the professor
2. Buttons can be bigger, noticeable and clearer on function



3. Inability to distinguish searches between companies, students, and events



4. Inability to find how to start a conversation with a company on the piazza network page

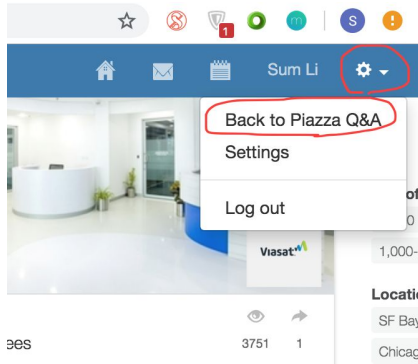


Augmenting Link to Link Navigation

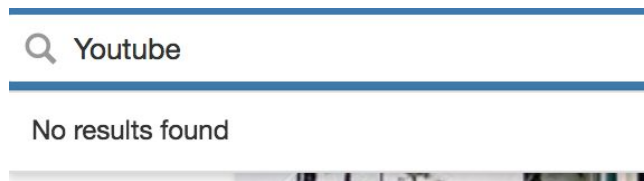
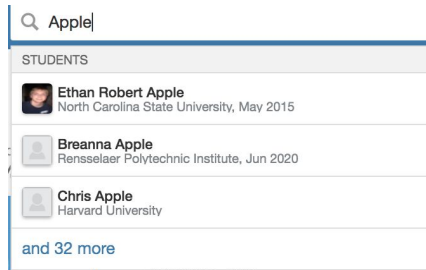
1. No search/help section
2. Companies section vs class discussion section should be separate websites; Difficult to navigate back to the class section



3. No direct link back to the homepage of the class discussion page; users need to click the “utility” button and the drop down list shows the redirect button



4. es 3751 1
5. The search bar of the network page often does not recognize the search keywords and does not list relevant results of each search



Usability Report

Our evaluation process included inviting 4 users to navigate through the website and then attempt to do the tasks. Users would verbalize their thoughts and suggestions as one of our group members sat next to them and took notes about anything that stood out. After all 4 user tests, we looked at the results and looked for common issues and patterns across all 4 users and organized all the issues based on the four major guidelines of Farkas.

According to the Farkas guideline 1, all the action buttons that are located on the page to make a new post are unclear by failing to ensure that the users are able to view and notice certain buttons. The arrow button only appears when hovering over a post. The action button requires the user to hover over a post for it to appear in the top right corner in a small, not too noticeable fashion. The action button is also an unclear button as the word action does not convey what it does. For student answers, the only function the action button lists is “flag as inappropriate” which is not that useful. There should be a delete comment option because we could not find a way to delete a comment we post. The overall interface of the webpage is also way too cluttered and does not leave much space between each button and tab, causing users to navigate more slowly as they have to digest all the nearby information and options before making a decision. The size of the buttons on the navigation bar are also too small, making it harder for users to click on the correct option quickly. The buttons on the nav bar are also unclear in the purpose as some of the icons do not clearly represent where the link will direct to. Second, the “Preview Post” from the posting page and the “Hint” from the network page does not indicate clearly that it is a clickable link since the text lacks the look of a formal button, a tab or an underline which

are common clues. “Preview Post” is also located in the bottom right corner which causes users to quickly glance over it and not realize that it is a clickable option. Third, the format and the color of the “good question” tab is similar to the “thanks” button which could lead to confusion of the functionality of both of the links. Both options lack necessary labels or ALT tags which could provide further details to distinguish the differences between the tags. People were also confused on the purpose of these as it is similar to a like button as it counts how many times people say thanks, but most of our users stated they would prefer to just type out and comment thanks. Fourth, when trying to connect with students involved in other companies, it is difficult because when users click to view the students’ profile, it does not fit within the screen and thus the connect button is hidden. The profile should ensure to fit and also make the connect button a different color in order to make it stand out as an important, actionable and clickable button. The company profile pages and the students who worked at that company profile pages are also very cluttered with too many options.

According to the Farkas guideline 2, piazza has a lot of different folder options for posts and this has failed to allow branches of hierarchies to converge. Related folders should be listed under one section together in order to provide greater organization and make it easier for users to find the right folder. When users are overwhelmed with so many options, it makes it harder to make a decision. Piazza also does not explain what are the purpose of these folders. Also, when searching for posts to answer certain ones, users found it hard to filter through all the folders and all the filter options that were hidden within an unclear settings icon. Users also oftentimes forgot which filters were on and it is not easily noticeable where Piazza shows what current filter is on. Second, the users are confused about the differences between the “students’ answer” and the “follow up discussion” when it comes to replying to a post. The converging between these two options could allow users to be able to reply to question more efficiently, reduce a lot of confusion and reduce the clutter of the interface with one less option. Third, there are two duplicate preview buttons when users are constructing a post or a question. Only one link is needed for users to preview the content before officially posting to the class discussion page or else it causes confusion as users wonder what is the difference between the two functions. Fourth, the website lacks any shortcut links or buttons for directly constructing a message or a question for the professor. The existence of the shortcut message button could allow users to reach the content faster instead of spending the majority of time in the navigation process.

According to the Farkas guideline 3, unfamiliar users are not able to find how to directly message the professor without the display of the necessary buttons and orientation information. It is complicated and hidden in areas that users do not think of looking. It should not be within the new post button as most people associate posting as a message to a group of people while messaging a professor is only for one person. This could be fixed with a direct message button. Second, some of the buttons on the main navigation bar are not noticeable due to the size and the unclear appearance. This makes it harder for the user to know the general purpose and the functions of the website without explicit clarification of the buttons or tabs. Many have icons that

are unclear, for example one is a world which represents notifications in Piazza and another is a speech bubble that directs the user towards their piazza mail. Third, users are not able to find a direct way to start a conversation with a company on the network page. The lack of necessary instructions and explicitly stated orientation causes users to spend most of their time testing and pressing a lot of unfamiliar buttons on the page to find out if there is a way to message the company.

According to the Farkas guideline 4, the main class discussion page does not have any search or help buttons for the users. Users are not able to look up instructions or explanations when they have questions during the navigation of the webpage. The structure of the help section should be designed to include the most frequently performed searches. Second, the companies searched section and the class discussion section are two different functions of piazza, but they feel unrelated to each other. These two functions should be separated into different websites since both of them have different navigation bars and most users would not be looking at the class discussion while also looking at companies. This has created confusion to the users on the purpose of Piazza and it becomes difficult to navigate back to the class discussion section once users are in the company searched section. There should be an easier way to go back and forth or just make the functions totally separate websites underneath one company, similarly to how google docs and google excel both fall under google drive. Third, the network page lacks a direct link back to the homepage of the discussion page and users are required to click the “utility” button. Then, the dropdown list would show the redirect button for homepage. However, a shortcut link which redirect to the home page could have saved the user’s time when there is a need for referring to old references from the homepage. Fourth, the companies search section does not have a browser history recorder which served as the purpose of keeping track of the visited companies and events. The record of history could save users from duplicating searches or visits to certain results which have been looked up before, instead of requiring the users to remember the previous searches. Fifth, the search bar of the network page does not recognize the searched keywords and does not list relevant result of each search. Users should be able to simply type in a phrase in order to formulate for a deeper and more complex searches.

From our evaluation, the main takeaway is that Piazza is cluttered with too many options and needs a simpler interface with links that are more apparent and easier to understand the functionality. Piazza need to be simplified in order to make it more intuitive and easier to navigate for both new and current users alike. This is important as Piazza is used for many different classes across many different universities and has a great exposure to a large amount of users.

Part II: Redesign the site

| Designing an Effective Link | Managing Large Numbers of Links | Providing Orientation Information | Augmenting Link to Link Navigation |
|--|--|--|---|
| Smaller “Views” count and larger and static “Actions” button (since actions button is more important and has links) | Add a separate button for messaging/writing a question for the professor so that it is less confusing and not under “New Post” | Because in making a post, all sections are REQUIRED, have some sort of indicator what has and hasn’t been filled out | Link to switch between class piazza and industry piazza |
| Preview Post link consistent with the other links (make into a button) | | Filtering just shows a tiny box say filtering by, hard to notice what you did worked, so maybe bold and highlight like “hw3” | Add a help section |
| Remove “Thanks” link since there is no purpose and just clutters the page | | | Make it easier to return to a view after a search (add a back button!) |
| “Good question” link should be removed unless a purpose is added (can use this for additional filtering under utilities--filter by good question) | | | Make the utilities button more clear as to what it actually does; maybe make it a navigation button?; remove the check mark on the drop down list |
| Nav bar icons are for the networking/industry side of Piazza and not question asking--the message icon is misleading since one may think it is to message a student or instructor; clearly | | | |

| | | | |
|--|--|--|--|
| indicate the bar is for Piazza networking | | | |
| When clicking on a user, a smaller and less-detailed version (preview) of a student's profile should be opened so that the connect button can easily be seen; add a button to go to the full profile if user desires | | | |
| Change color of the "Hint" text so that it does not look like a link | | | |

The screenshot shows a Piazza question page. At the top right, there are two annotations: "smaller" with an arrow pointing to the "7 views" badge, and "larger and static" with an arrow pointing to the "Actions" dropdown menu. The question title is "Task 10 Saving to Disk time". The question text discusses a task involving dataframes and saving to disk. Below the question, there is a "project2" tag, an "edit" button, a "good question" badge, and a "0" count. At the bottom, there is a section for "the students' answer" and a section for "followup discussions".

Redesign ideas:

- Top navigation
 - Add a messaging feature (to message other students and instructors) because the create post → post to instructors only feature is not intuitive

- A link to toggle between Piazza class and Piazza networking
 - No need for “Search companies” etc part since that will only pop up in Piazza networking
- Piazza logo (links to homepage of either Piazza class or Piazza networking depending on the mode you’re in)
- Keep the class dropdown, Q&A, Resources, and Statistics
- Singular profile button (profile is the same for networking and class)
- Question feed
 - Add a filter by good question and good answer
 - When you click on a folder, highlight the folder that you are currently on
 - Add a back button (the collapse feed arrow is very misleading because it looks like a back button)
 - Remove number of views a post gets (not important)
 - Make the actions button larger and static (not just when you hover over a post)
 - Change “thanks” to good answer
 - Add button to save post and then filter by saved posts
- New Post
 - Indication that a required field is not filled out; indication that a question is required
 - Make “Preview Post” into a button
- Connecting with students
 - When clicking on a student’s name, show a small preview of profile (from both class and networking view)
- Searching
 - Include a back button

Redesign Interview Chart

| User | Comments |
|------|---|
| 1 | Less keystrokes required for each tasks, less buttons overall |
| 2 | Easier to find message a professor section, less time taken to find |
| 3 | Easier to go back and forth from class discussion to searching for companies, likes the back arrow button |
| 4 | Cleaner interface with less folders, links are more noticeable, actions button is static |

Part III: Propose your new design

Design Proposal

When reviewing the feedback given by the users testing the original Piazza platform, we noticed that the majority of the comments pertained to the cluttered interface, confusing navigation, and difficulty of finding how to complete certain tasks. Many of these design problems are addressed in David K. Farkas and Jean B. Farkas' *Guidelines for Web Navigation*. Using the Farkas paper as a reference, we redesigned the Piazza interface, focusing on links, navigation, and decluttering, to make the interface more user-friendly and intuitive when completing simple tasks on the platform.

The first task we had our users complete was to create a new post. Most people did not have an issue completing this task but still expressed some confusion with the links on the form displayed. According to Farkas' guidelines, links should clearly indicate that they are links. They should stand out for easy navigation purposes. With that said, in the original Piazza design, the "Preview Post" link was hidden away and difficult to find because unlike the other links, it was not a button and its text was smaller. It also did not have an underline or any other indication that it was a clickable option besides being a different color. As a result, our redesign changed the "Preview Post" plaintext link into a button, moved it higher up and closer to the other buttons and we also made it its own special color. This allows for uniformity between all the links on the page so that this one would not get outshadowed and hidden. It also ensures that "Preview Post" clearly indicates a link when the user looks at it. Although not mentioned by the original testers of the platform, other improvements were made to the design. We added red asterisks to the required fields of the form, as before, there was no indication that all fields must be filled out. This improves usability as it decreases the mistakes a user will make when filling out the form, since the previous version did not make it clear that some fields were required. To make the form more intuitive, we also renamed some of the fields. Rather than "Summary" and "Details", we renamed the two fields to "Title" and "Body", respectively. This mirrors what most modern email, message, and forum posting systems use, reducing confusion and showing something familiar to users. Having the interface mimic commonly used interfaces, people are able to learn how to use Piazza faster. These changes can be viewed below in *Figure 1*.

Post Type *

☒ Question
If you need an answer

☐ Note
If you don't need an answer

Indication of a required field

Select Folder(s) *

project1 project2 project3 hwn logistics

Title *

Enter a one line title...

Body *

Here is a some text input.

Here is another paragraph of input.

Preview Post button to match the buttons for the other links so that this link does not get hidden

Post My Question to COM SCI 155 Save Draft Cancel Preview Post

Figure 1. Redesign for creating a post

When it comes to the general questions and answers forum, we focused our changes on decluttering, which was one of the most popular comments we received regarding the old design. We first removed the history bar and the “Views” counter as seen in *Figure 2*. Both of these showed information that was unnecessary for the use of the platform and only added clutter to the page. Just by removing these, we were able to add more negative space, making the important components stand out and decreasing the time for user navigation as there is less information for the user to read. We also removed the question history scroll function as we thought there was no need for a user to see the progression of answers over time on a post. Removing this bar and decreasing clutter provides more of a benefit to the user than having it there at the top.

Another common issue that came about across our users was the action button. Originally, this button would only appear if a user hovered over the question or an answer. The action button on the questions would provide a drop down list of functions for the user to choose from, but the action button on the answers would only provide one option of “Flag as inappropriate.” Since there was only one function, we thought the action button on the answers post was not needed. We removed the button on the answers and instead have one action button at the top of the post that would pertain to all posts within the question. With it being at the top of the post, it is more noticeable to the user and we also made the actions drop-down button larger and static. This makes it easier to complete tasks such as following posts and reporting inappropriate questions. This especially helps new users as the button is easier to find and it is appropriate for new users

as the action button is useful and should be more quickly accessible. It also follows Farkas' guidelines by making all links and navigation noticeable and easy to find.

When users did task 2 which was answering a post, there was also immense confusion on the difference between "student's answer" and "follow up discussion" which are two ways a user can respond to a posted question. Since we saw the follow up discussion functionality as very similar to a user just creating a new post, and thus it did not need its own distinguished text box. To solve this problem, we decided to remove it and just have all replies be considered answers as seen in *Figure 2*. We converged the functions into less links, creating less options and text for the user to read and comprehend and thus improving speed of task completion.

As mentioned by one of the users testing the original Piazza design, the folders at the top of the page were cluttered and often caused confusion. To fix this, we instead added a "Filter" button. When clicked, this button could open a list of all the folders to filter by as well as the already-included options such as "Unread", "Updated", "Unresolved", and "Following". Having a single button that would open up all the filtering options cleans up the interface and combines all of the filtering links into one place, something that wasn't effectively done before. This follows Farkas' guidelines for managing a large number of links as well as creating efficient link hierarchies. Other minor changes that we added included renaming the "thanks" option for each response to "good answer" so that it would parallel the "good question" option for the questions. We originally were planning on removing these two buttons altogether; however, we concluded they might be useful to have, as a user can filter by good questions and good answers. We changed the text on these buttons to blue and underlined so that a user can clearly see they are clickable, a point emphasized by the Farkas paper. Finally, we added a favorite feature. Originally, a user could "follow" a post, but it was hidden within a small arrow button that would only appear when the user was hovering over a post. Since we saw this function as important, we decided to make it more apparent to the user by adding a star (see *Figure 2*). The star that is on each question can be clicked by the user to mark it as a favorite question. Then, the user can filter questions based on ones that were marked as favorites. We believe this improves the usability of the platform since it helps users search and save for the posts they want. The original search feature was not sufficient in helping users quickly sort through posts, so this added favorites list can help users save posts they'd otherwise search for.

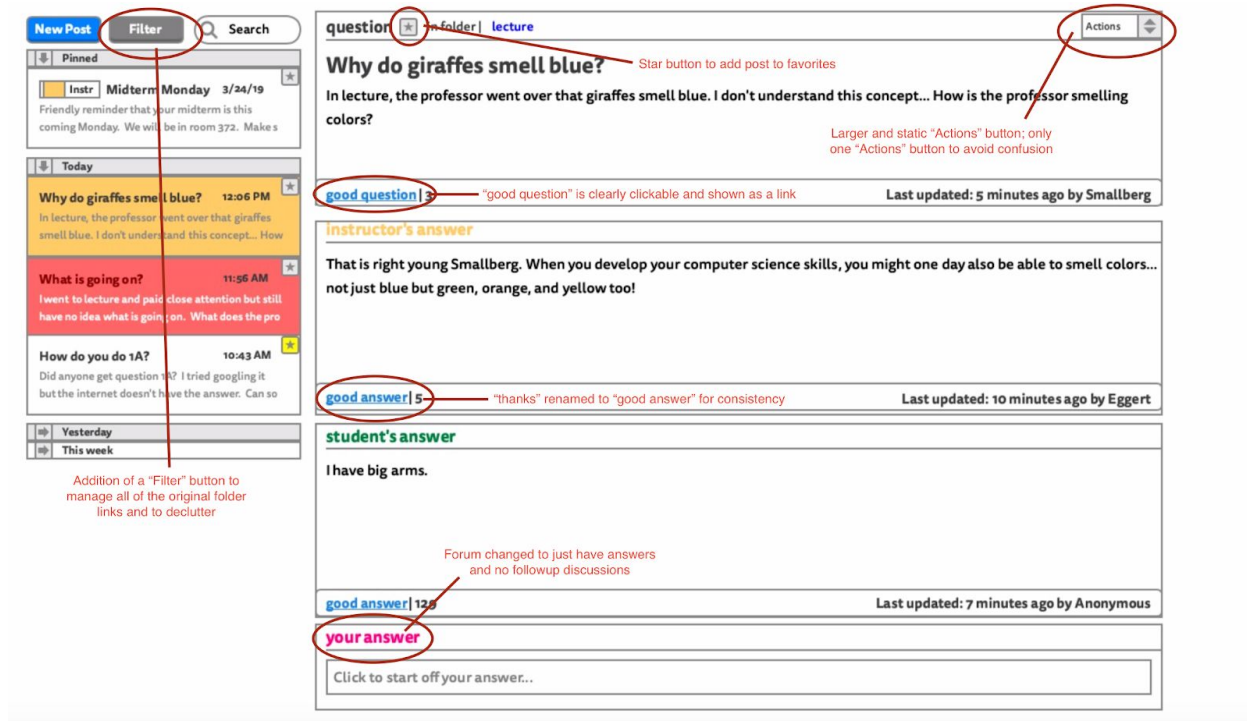


Figure 2. Redesign for the question feed

While on the topic of the search option, the original design for Piazza made it difficult to return to all of the questions after conducting a search. As a result, with the redesign, we added a back button when searching through posts as seen in *Figure 3*. This allows users to undo their actions much easier and return to their original state they had been in before searching.

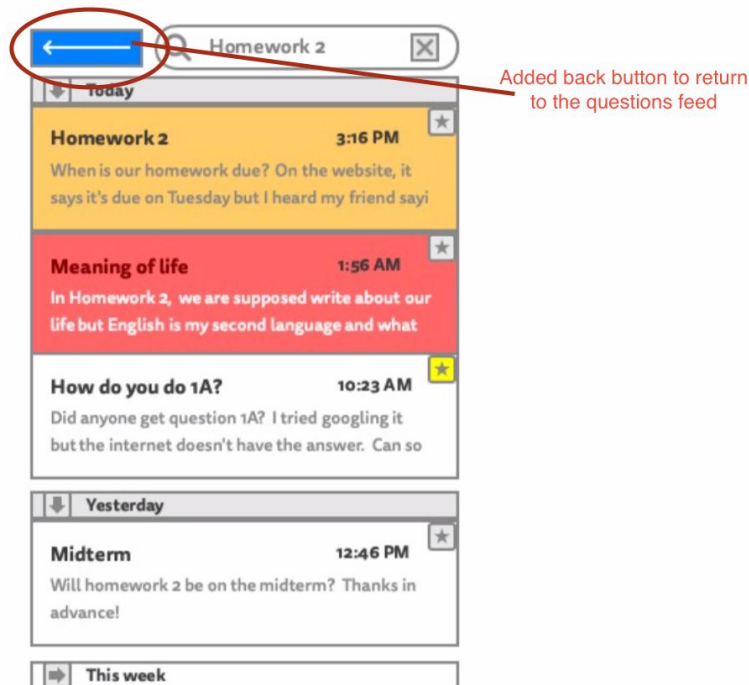


Figure 3. Redesign for the search feature

The next major redesign we made regarded the navigation bar at the top which is seen in *Figure 4*. The users testing the original Piazza design found the icons on the navigation bar to be misleading and confusing. The icons on the right side, though appearing to be basic links to notifications and messages, actually take the user to the notifications and messages that are on networking side of Piazza, which is completely independent to the question asking forum most people focus on. There also is a profile section displaying the user's profile picture and name. However, the user must specifically click on his or her name to get to his or her profile because if he or she clicks on the "Join our team" text instead, the page redirects to Piazza's career site. According to Farkas' paper, this is not an effective use of links, as the link to a user's profile is difficult to find due to its size and the fact that it doesn't actually look like a link. Also, the clutter in the profile section of the navigation bar makes it more difficult to actually get to the profile since the user may easily accidentally click on the link to the career site. As a result, a major change we made to the navigation bar is the deletion of the profile section and the addition of a single button with a user that indicates user profiles. This improves usability as the link is easy to find, clear as to what it does, and large enough that a user can click on it with no mistakes. Another change we made was the addition of a message button. Rather than linking to Piazza networking messages, this button links to a system to message either a professor or a company. The current system to message the professor requires a student to create a post that only the professors can see. This is unintuitive as it is usually expected that when you create a post, it is to be seen by everyone on the forum. Therefore, instead of sending a message to a

professor through the “New Post” button, a user can access messages from this message icon on the navigation bar. The final change made to the navigation bar is the addition of the “Network” link. The original version of Piazza makes it difficult to switch back and forth between the networking and question forum versions of the platform. Once in the networking side, there is no link that directs back to the question forum. This goes against Farkas’ ideas of easy web navigation. To fix this, we added the “Network” link that when in the question forum version of the site, the user will be redirected to the networking version. Now, when in the networking version of the site, that link can change to say “Question”, and a user can click on it to toggle to the question asking version of the site. This improves the usability of the site, as it makes it more easy to access different parts of the site and makes all of the links more clear.

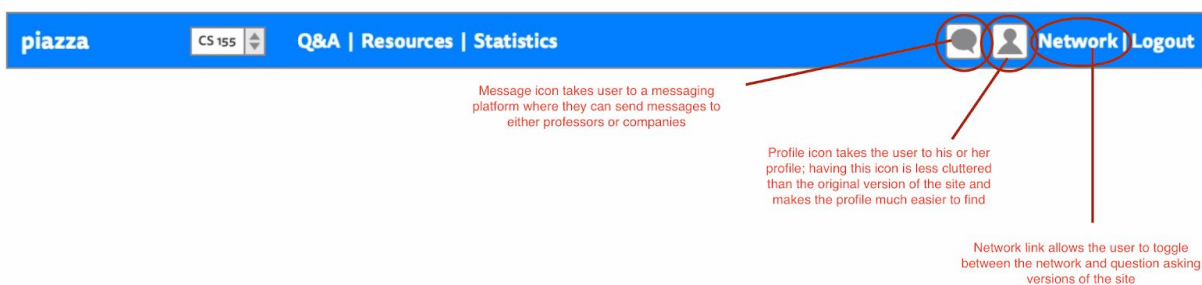


Figure 4. Redesign for the navigation bar

The final redesign we proposed is the use of a profile preview. When in the networking version of Piazza, a user can click on another user’s profile and the other user’s profile then pops up onto the screen. However, because the profile is so large, the pop up usually goes off of the screen and gets cut off, thus rendering it useless. Therefore, we proposed a profile preview, which can be seen in *Figure 5*. When a user clicks on another user, rather than an entire profile popping up, only a preview is displayed on the screen. This preview shows a user’s picture, name, the option to connect with him or her, and the option to message him or her. The picture and name are included to help identify the user. The buttons to connect and message are included since they are common actions when viewing or clicking on a user’s profile. Finally, on the bottom of the profile is a link that says “View Full Profile”. This link is easy to find since it is underlined and blue. When clicked on, this link just redirects a user to another user’s full profile. The addition of the profile preview improves usability as it is a lot less cluttered and offers a shortcut or quicker way for users to message or connect with someone else.

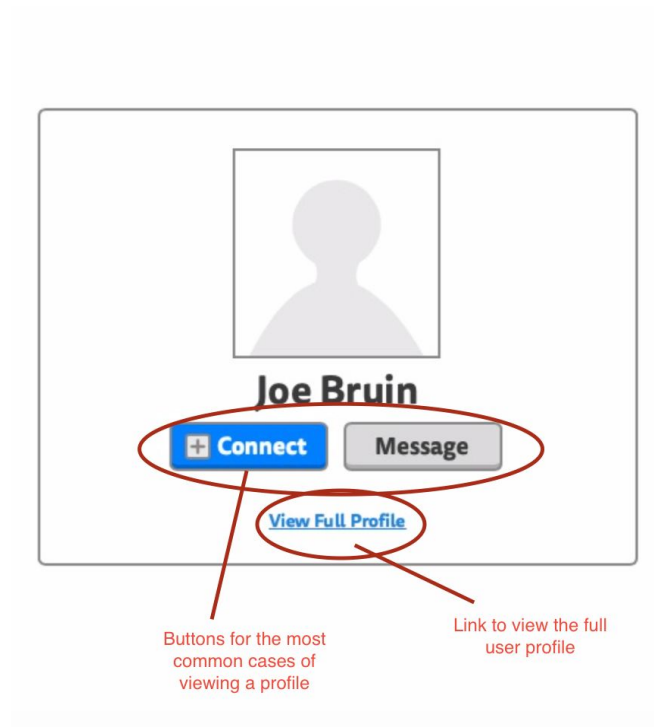
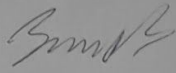

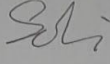
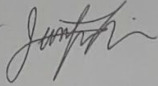


Figure 5. Redesign for the user profile pop-up

Part IV: Attribution

CS188 HW4 Attribution Document

| <u>Team Members</u> | <u>Assigned Work</u> | <u>Signature</u> |
|---------------------------|--|--|
| Benjamin Bach (404933137) | Redesign the site & Propose the new design |  |
| Maureen Jiang (904564374) | Redesign the site & Propose the new design |  |
| Sum Yi Li (505146702) | Evaluate the existing site & usability report |  |
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