[SOFTENG 350] Assignment 3, Group 10

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Hi-fi prototype and usage testing for sharing files from a cloud data service, for university student group-work

Prototype Description

Our prototype was designed with the following scenario in mind:
We have a student who is currently logged in to their own account on the file sharing service. They want to share the index.html file and all its related files to another teammate/their Human Computer Interaction team. In addition, the user wants to put tags and deadlines on the file so the last team member can see the status of each file and know when it is time to submit them- the deadline is occurring in a week.

User Needs

Emotional: a need for status information of deliverables - anxious
With tight deadlines, students can be stressed with the many deliverables that need to be completed. It can be hard to keep track of multiple files and with multiple people working on those files, things can get confusing and easily miscommunicated. This can lead to anxiety and unnecessary worry within a group. Students need a way of tracking the progress and status of these deliverable files. Team members should know at a quick glance, if a section needs help, needs more time or has been completed. Providing this information helps the group feel in control of the assignment, and better plan out their resources and time. This will help ease anxiety.

Emotional: a need to see the relation between shared files - frustration
Many files have certain relationships with one another. For instance, HTML files can reference CSS and Javascript files. During large and complex projects, files and directories can easily get cluttered. Also, when different sections and elements of the project are being created by different members of the team, confusion can easily occur. This may lead to frustration when students are browsing through the file system. Students need a way to easily identify and recognise these relationships to help with the development process for their project. Showing how related files can be pieced together visually can decrease this frustration and let users easily understand certain directories within the project.

Interaction: a need for project planning and progress tracking - time management
An essential part of project planning/success is setting deadlines and goals. This is even more essential in group work, because the problem is increased exponentially, as every individual has their own schedules to follow. Schedules can get chaotic and students will need help organising them to stay on track. Students should be able to be assigned specific tasks and deadlines related to certain files or deliverables. Being able to visualise and record deadlines for specific items will help students organise their workload and time. This will lead to better planned out deliverables and tasks that should help the group complete their assignment accordingly.

System Functionality

File Tagging System

This is where students can add custom messages and notes onto each file in the form of “tags”. All tags can be seen on the files preview when a file is selected (see figure 1).

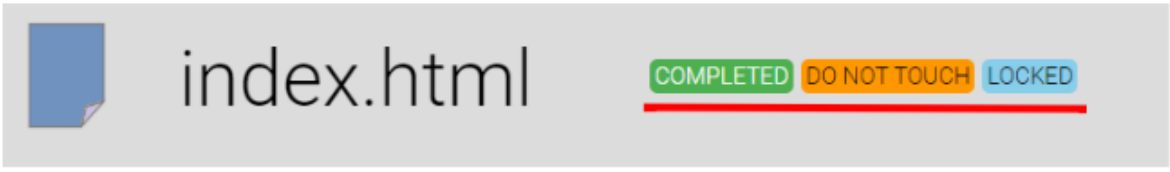

Figure 1: File tags are underlined red

This helps remind other shared users of the current situation of that file: whether extra help is needed, or there are tasks still to be done, or the file is completed and should be left alone. This helps students keep track of each other and better organise themselves when in groups. This helps satisfy both our first and third user needs.

Related Files System

This system shows the dependencies and relations between files. The relationships should be manually set by the user. When a file is selected, the user can see all the related files in the form of a blue dot, and hover over for a tooltip (see figure 2).

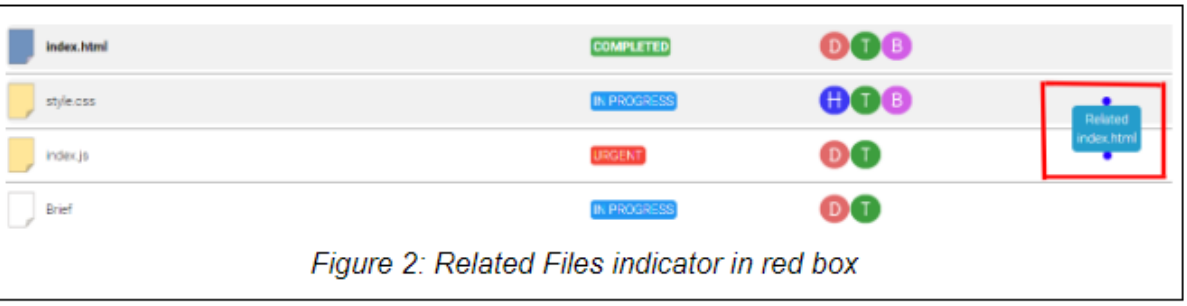

Figure 2: Related Files indicator in red box

Related files help visually organise and decrease the complexity of large projects for group members. This helps group members that are unfamiliar with particular sections more easily understand their layout without having to sift through the code looking for file imports and relations.

Additionally, when sharing files to other users, there is the option to share all related files (see figure 3). This is important because it allows the user to share multiple files and groups of files that are important to one another. For example, there would never be a case where you only share a html file and not the css file it refers to. Both the above functions mainly serve to deliver a solution to our second user need.

Figure 3: Share all related files tick box underlined red

Calendar

Users can assign deadlines or tasks associated with certain files, these dates and deadlines are displayed in a calendar (see figure 4). Having clear dates of when exactly deliverables are due helps users visualise everything they must accomplish, greatly increasing their time management ability. Clicking on a deliverable will also highlight, in the listing of files, the relevant associated files (see figure 4 and 5). Students knowing exactly the status of each file and when it is due, aids to accomplish our first and third user needs. Furthermore, a "collaboration" symbol was added to identify which deliverable belonged to a "Shared Drive", that is, a group project. Students can maneuver around and organise their personal and group project work easier with all these statuses.

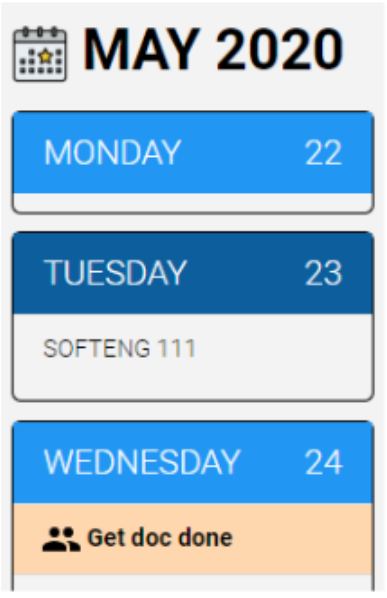

Figure 4: Calendar

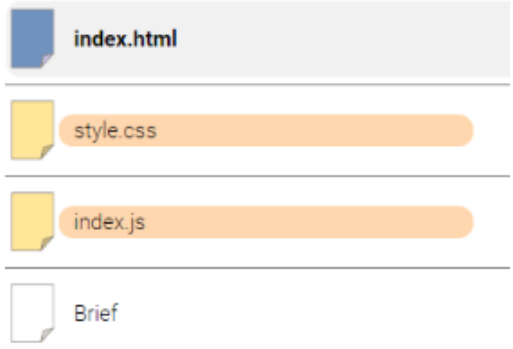

Figure 5: file selection according to calender

Visual and other design considerations

There were many considerations and design processes we went through to decide on our final webpage layout to ensure a clean look, so university students would not have any trouble navigating through.

The majority of our webpage is of a blue monochrome theme, this is done to increase interface harmony and unity. Blue was chosen because of its neutral tone; it often represents stability for the user. Various hues add character to interface elements such as the file hover, and indicate different meanings such as the colour for today in the calendar.

The left navbar and calendar are balanced and symmetrical in width and height. This helps add comfort and balance to the layout. However, the background color for the two elements are contrasted to represent their differences in functionality.

The left navbar and calendar also helped us to utilise the principle of surroundedness to layout our webpage. The listing of files in the middle are framed by the calendar, the left navbar and the top bar to *emphasize* the middle of the page as a focus point and the rest as ground (see figure 6).

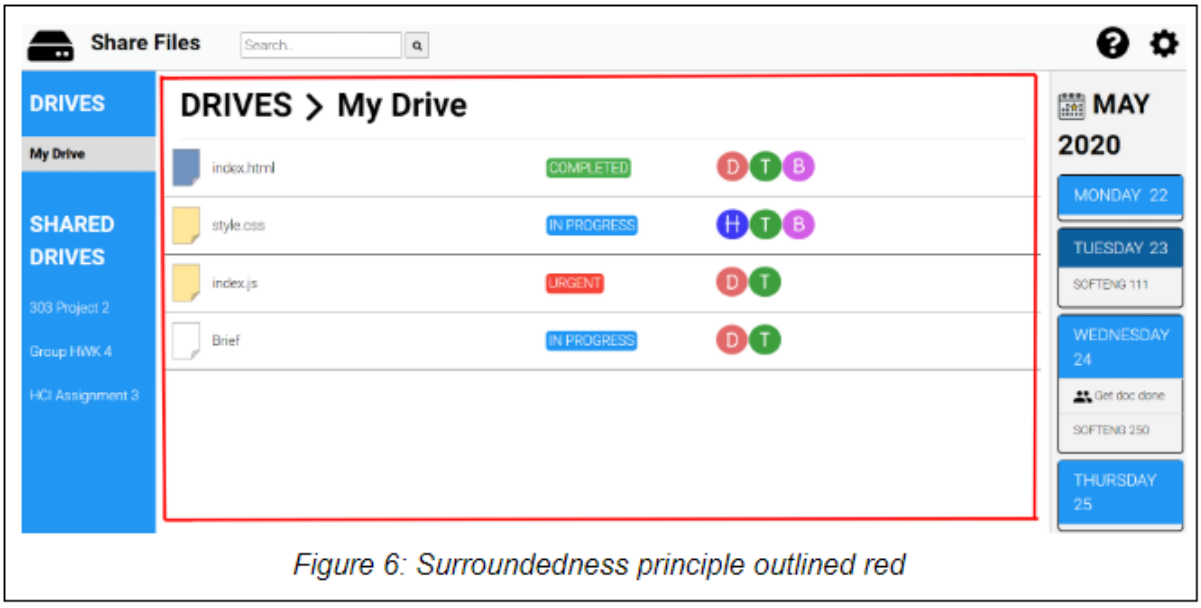

Figure 6: Surroundedness principle outlined red

Different fonts of the Roboto font-family, by Google, were used in the overall design of the webpage. For our main headers we used the bold variation of Roboto (see figure 7), bold having the highest weight value out of all the variations, it helped to plainly emphasize the titles and headers. This directs the users attention to these labels upon landing on the page. In addition, selected elements were also bolded to present feedback to users actions.

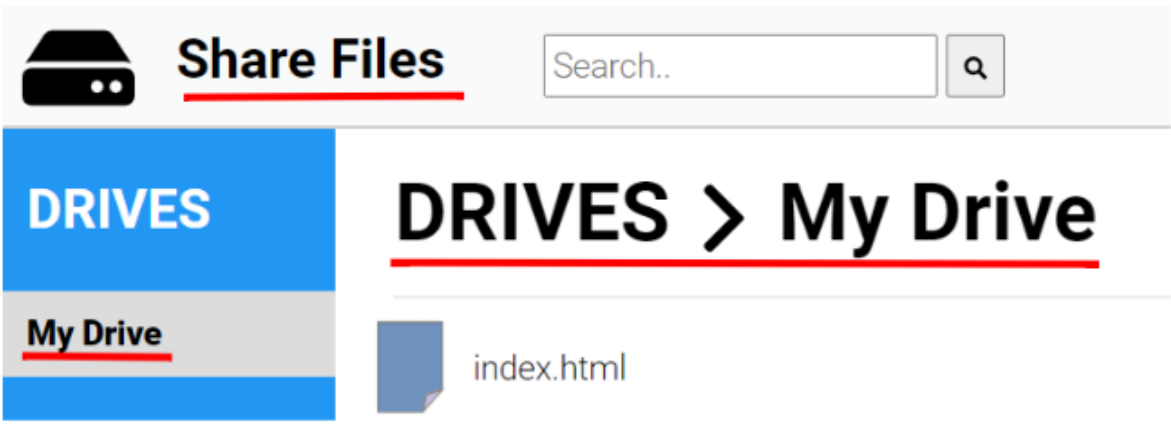

Figure 7: Bold headers and titles underlined red

All paragraph text and smaller headers use the thin or light variation of Roboto (see figure 8). These fonts have a much lower weight compared to the fonts used as headers. We decided to use this variation of Roboto because of its very modern and minimalist design. This helped to not overwhelm the user with information and content.

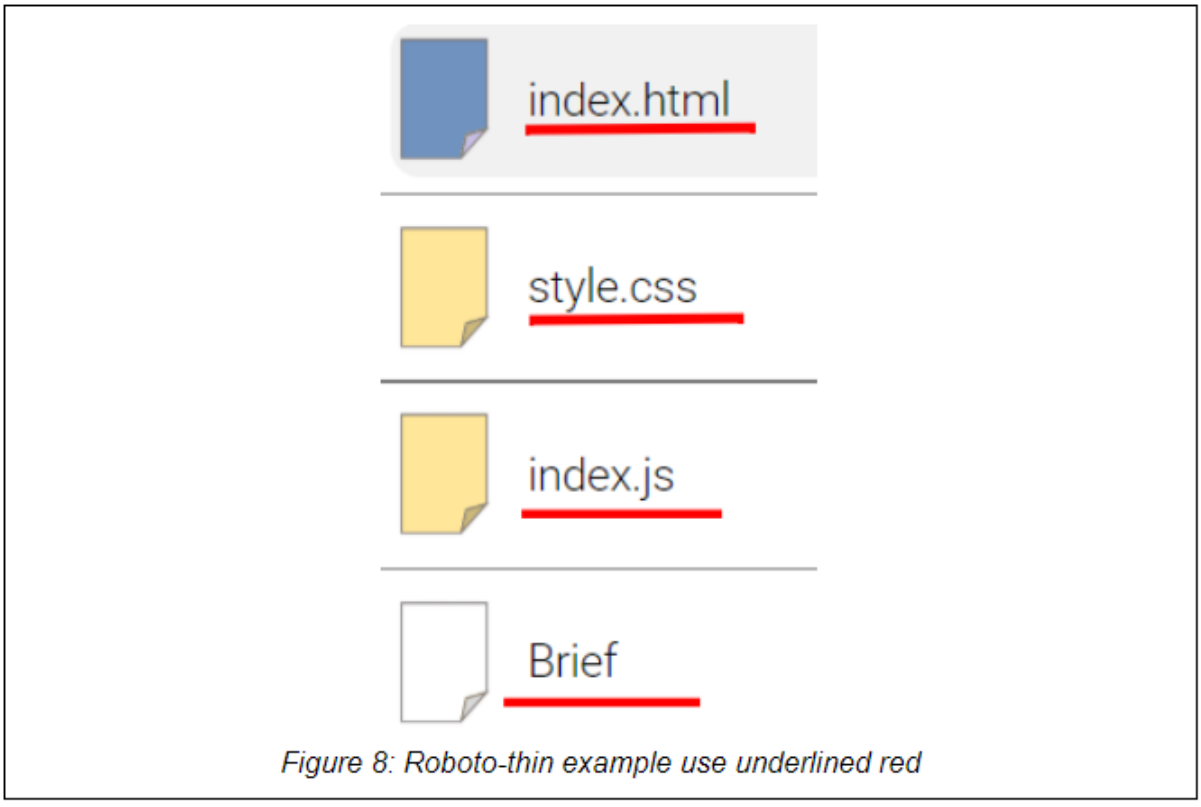

Figure 8: Roboto-thin example use underlined red

There are also various groupings that were created to divide certain categories. The main files are aligned and grouped together vertically. In addition, the urgency or status tags and the shared users are also grouped vertically in parallel (see figure 9). These are all separate

vertical groupings to eliminate confusion when trying to understand the various different pieces of information. Within these groupings each element is also separated by a black/grey line and white spaces. This helps space out and emphasize each individual file and also prevents the page from getting too crowded.

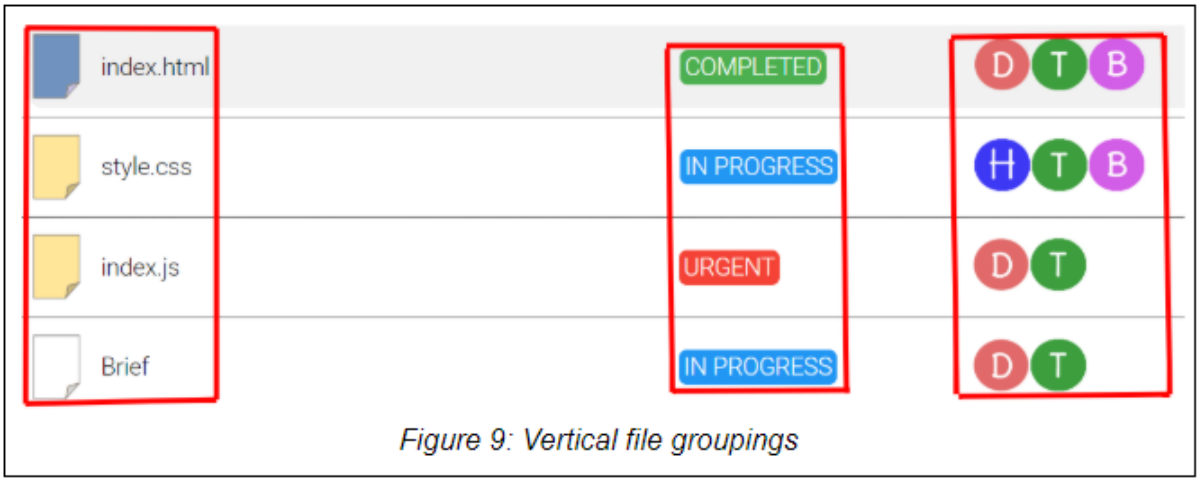

Figure 9: Vertical file groupings

In the details pane, tags are grouped horizontally, above a vertical grouping of details to clearly represent different sets of information (see figure 10).

Figure 10: Details panel groupings: tags and details

The details pane, itself, is a feature used by most file sharing platforms. We also decided to implement one to display more information about a file, without cluttering the main file display section. The details pane is separated from the other elements of the page with white spaces, to emphasise itself as an independent and important element. This also materialistically elevates the layer and brings it closer to the users attention.

There are also many implementations to support interactions and provide feedback to user actions. Most of the tags display a tooltip when they are hovered over, this lets the user know more specific details about the tags (see figure 11). Each file displays a grey colour when hovered to imitate the interaction of a hover (see figure 11). When selecting a file, the grey background remains and also all the text is bolded as another way to communicate that the user has performed an action. On successfully sharing a file a popup will notify the user of the successful transaction (see figure 12).

Figure 11: Interaction and feedback examples

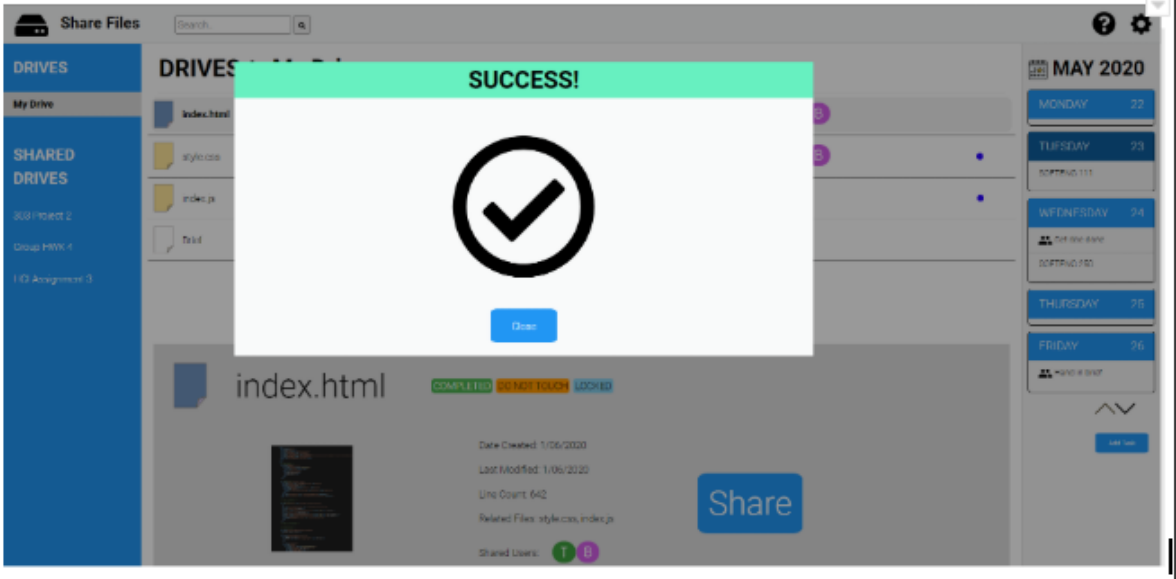

Figure 12: Share file success prompt

Video Screen-recording of the User Interface in Operation

https://youtu.be/3k9kKf8CRaU

Protocol Description

Our protocol consisted of 4 parts: the greeting, informed consent, task instructions and questionnaire. In the greeting, we introduced our product “Share Files”, and informed the participant of the structure of the test and what they would be doing. The informed consent detailed the purpose of this “Share Files” evaluation and their rights on the recorded usage data. See the appendix for more details regarding the protocol.

The task instructions section began with informing the participant the intended scenario with the system. We asked the participants to speak their thoughts aloud when following our prompts.

The first prompt was exploratory free use for informal interaction. We wanted first impressions of the system (which included aesthetic appeal), and expectations of a system like this for the described scenario. This would also reveal what the participant sees and interacts with first, which would highlight the screen elements that are appropriately emphasised and the natural flow of how the participant would access their files. This was measured by timing how long the participant took to understand each screen element they approached.

The second prompt explored the effectiveness of our solution to the second user need. When a file is selected, its related files/dependencies will be displayed in the details panel in addition to a blue indicator next to the related files. The prompt tested the usefulness of these two features by asking them to find the related files of index.html, and determine whether the blue dots were useful. The method the participant used to determine related files was observed and the duration was also taken.

Our next prompt tested the usability of our crucial share feature, via the number of errors they made and the time taken to share. The main goals were to see how easy the participant was able to share a file by asking them to share index.html. This would also reveal how intuitive the sharing system was and how efficient they were with the screen elements. Lastly, this would help us determine the learnability of other built-in functionality like tagging.

The next few prompts tested the calendar feature, which satisfied our first/third user needs. We first asked the participants to find the tasks due tomorrow. This tested the visual elements of our system, specifically whether the participant could identify “today’s” date to find tomorrow’s tasks; we measured how long it would take. The fourth/fifth prompt also encouraged thoughts on the usefulness of the file tags and the “shared” tags that identified the progress on the tasks that were due tomorrow - could the participant easily identify them and make sense of them? This would reveal fit for use of our tags.

The final prompt revisited the share feature, which asks the participant to share a certain file and add a due date, tag and calendar task. This tested a more complete use of our system. It revisited many of the features tested before and was carried out last to test how a more experienced or advanced user would interact with the system. This tested the memorability,

ease-of-use and efficiency of the system. Much qualitative data was collected, for instance number of mistakes and time taken.

The final section of the protocol was the questionnaire. Most questions measured their subjective satisfaction, which could help gauge what visual design features lacked and other user experience issues missed. We gauged their perspective on the emotional impact the system had on them and how useful they thought the system would be to their student user needs. We asked for descriptions and scales to measure their impressions.

Usage Testing Results

We interviewed two participants in total; both are students of the University of Auckland. The first participant has never done programming or engineering before. We thought they would help represent the less technical and general student population at the University of Auckland.

The second participant is currently in their third-year studying software engineering; they take SOFTENG 350 this semester. They perfectly represent the stated scenario. This was viewed as both beneficial and disadvantageous. The participant would provide in-depth insight to potential problems being familiar with usage testing, but they would lack the inexperience that a new user would have.

Raw results can be found in the Appendix.

Disclaimer: quantitative data recorded is potentially influenced by having to speak aloud their thoughts. This is only data representative of two people. Consent forms and names of participants have been omitted for their privacy.

The participants' first impressions of the webpage was positive. It was described as "clean", "simple" and minimalist. The "intuitive" three-panel layout of the webpage seems to be well received. One felt that because it is simple, it would be more efficient to perform an action; useful for busy university students. This suggests a successful visual design; students will find it more satisfying to use, and potentially faster to use to complete their assignments hence good usability.

Participants noticed the left navbar first, which could be because of the solid blue colouring. However, it took participants an average 78 seconds for them to click on "My Drive" to access their files. This was because existing systems like Google Drive have their home page as their "My Drive". The user expected to land on the page immediately and not have to navigate towards it. This design of the page did not speak the users language and should be reconsidered.

Participants noticed the calendar early on when exploring and expressed their likeability towards its potential usefulness. This shows that our calendar was easy to understand and spoke the user's language. Furthermore, they liked the idea of being able to visualise deadlines and see the urgency of different files. They liked how you could immediately see

the tasks when landing on the site; it was very easy to see tasks due and see what was on the agenda. However, when asked to identify today's date, our second participant made a mistake and did not notice that today's date was represented in a darker shade of blue. Instead they assumed today's date to be the first day represented on the calendar. To satisfy our third user need, it might be more user friendly to implement a rolling calendar, instead of a fixed weekly calendar.

They were also asked to find the files related to each calendar deadline. The first participant, in the beginning, did not notice the calendar deadlines were clickable and were confused about what they actually represented. However after selecting a task, they both noticed the orange highlighted files and immediately assumed they were the related files, although hesitant. This shows that the highlighting of the files is an effective way to show what deadline they are associated with. However, the visual design of the calendar may need to be reconsidered, for instance adding icons to better represent calendar elements, so users feel at more ease when managing deadlines..

We also tested the usefulness of our related files feature. After being prompted, both participants looked for related files in the details pane first, not noticing the blue indicators in each file bar. When prompted again did they notice the use and purpose of the blue dots. One participant described that the blue dots feature seemed useful, but did not use it because at first he did not understand its purpose. They said it was simple but effective. This suggests that the feature was hard to learn and understand for unfamiliar users, but effectively increases ease of use for experienced users.

The participants were prompted to locate which file was shared to drive. We grouped our indicators that showed shared drives and shared users together. This confused both our participants and they expected the grouping to only represent shared users, so they did not search for the drive indicator there. This implies we need to redesign and separate these indicators into two different groupings.

The participants took 2 to 3 minutes to complete the first share file test. They were uncertain about what options were optional and what they meant. We did not provide any help/documentation and this should have been more heavily considered. Participants took less than 1 minute to complete the second share file test, despite the added complexity and more specific instructions. This implies that our system is memorable, as it seemed to be easier to use after the participants understood what each option meant.

Finally, there seemed to be a mismatch between the student’s language and the system’s language regarding the tags feature. “Locked” and “DO-NOT-TOUCH” seemed to confuse the participants and they were hesitant about commenting on their meaning. To fully support our first user need, we need to use keywords for our tags to clearly describe the status of files. Overall, they found the tags concept to be very useful, both rating a 10/10. It would be “useful to see who hadn’t done their work”; but “custom tags” would be more fit-for-use to target specific assignments and what is needed to be done.

References for the Webpage

External Sources

W3 CSS: https://www.w3schools.com/w3css/default.asp
jQuery: https://jquery.com/
Roboto Font: https://fonts.google.com/specimen/Roboto

Icons

File icons were adapted from the Assignment 3 Base provided by the SOFTENG 350 course.

HDD: https://fontawesome.com/icons/hdd?style=solid
Search bar: https://fontawesome.com/icons/search?style=solid
Settings COG: https://thenounproject.com/search/?q=cog&i=45864
Question Mark (circle): https://fontawesome.com/icons/question-circle?style=solid
Circle Check for Share Success: https://fontawesome.com/icons/check-circle?style=solid
Calendar Icon: https://www.flaticon.com/free-icon/event_2413421
Calendar Down Arrow: https://www.flaticon.com/free-icon/down-arrow_318426?term=down%20arrow&page=1&position=9
Calendar Up Arrow: https://www.flaticon.com/free-icon/up-arrow_892555?term=up%20arrow&page=1&position=7
Calendar Collaboration Icon: https://www.flaticon.com/free-icon/two-men_60692?term=two%20people&page=1&position=24

Appendix

Deployed webpage link (for usage testing)
https://g10-softeng350-a3-sharefiles.netlify.app/

Protocol Script

Greeting
Thank you for coming along to be a part of our tests for Share Files, [PARTICIPANT NAME]! I'm [TESTER NAME]. This is our first prototype. In this test you will be interacting with various elements of our prototype Share Files webpage. You will be interacting with a prototype and as such many features and functionality have yet to be implemented.

Informed Consent
The purposes of this test is to solely gather human subject data on the Share Files web page. You may withdraw anytime you like and there are also risks or rewards associated with the test. You may be recorded and the data will be kept private to Share Files team members and course lecturers. We'll link you a consent form if you're all okay with this. Send it right back once you've finished.

(See the next page for the Consent Form)

Disclaimer: consent forms and names of participants have been omitted for their privacy.

Informed Consent for Participant of Development Project

Assignment 3 Group 10 - Version 1 Title of Project: Share Files
Project team member(s) directly involved: David Xiao, Jennifer Lowe, Tianren Shen

I. THE PURPOSE OF YOUR PARTICIPATION IN THIS PROJECT As part of the Share Files project, you are invited to participate in evaluating and improving various designs of Share Files, a web application to help university students collaborate and file share on assignments remotely. The prototype is designed with a scenario in mind- to support and enhance the sharing and collaboration of code files (HTML, CSS, JS) and various other files for Human Computer Interaction students.
II. PROCEDURES You will be asked to perform a set of tasks using Share Files, the web page. These tasks consist of interacting with elements of the webpage, interpreting and speaking your thoughts about certain elements of the webpage. You may also be asked questions regarding the webpage. You will be asked to visit our webpage.
Your role in these tests is to help us evaluate the designs. We are not evaluating you or your performance in any way. As you perform various tasks with the system, your actions and comments will be noted and you will be asked to describe verbally your learning process. You may be asked questions during and after the evaluation in in order to clarify our understanding of your evaluation. You may also be asked to fill out a questionnaire relating to your usage of the system. The evaluation session will last no more than four hours, with the typical session being about two hours. The tasks are not very tiring, but you are welcome to take rest breaks as needed. If you prefer, the session may be divided into two shorter sessions.
III. RISKS There are no known risks to the participants of this study.
IV. BENEFITS OF THIS PROJECT Your participation in this project will provide information that may be used to improve our designs for Share Files. No guarantee of further benefits has been made to encourage you to participate. You are requested to refrain from discussing the evaluation with other people who might be in the candidate pool from which other participants might be drawn.
V. EXTENT OF ANONYMITY AND CONFIDENTIALITY The results of this study will be kept strictly confidential. Your written consent is required for the researchers to release any data identified with you as an individual to anyone other than personnel working on the project. The information you provide will have your name removed and only a subject number will identify you during analyses and any written reports of the research.
EMPIRICAL UX EVALUATION: PREPARATION 499
The session may be recorded. If it is recorded, the recordings will be stored securely, viewed only by the project team members and erased after three months. If the project team members wish to use a portion of your recording for any other purpose, they will get your written permission before using it. Your signature on this form does not give them permission to show your recording to anyone else.
VI. COMPENSATION Your participation is voluntary and unpaid.
VII. FREEDOM TO WITHDRAW You are free to withdraw from this study at any time for any reason.
VIII. APPROVAL OF RESEARCH This research has been approved, as required, by the University of Auckland Electrical, Computer Systems, and Software Engineering department for projects involving human subjects for SOFTENG 350, Assignment 3.
IX. PARTICIPANT RESPONSIBILITIES AND PERMISSION I voluntarily agree to participate in this study, and I know of no reason I cannot participate.
I have read and understand the informed consent and conditions of this project.
I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project. If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

Signature Date:
Name (please print):
Contact: phone or email:

Task instructions
We'll be taking you through tasks, and prompt you as you navigate through our product as a real user.
Please do speak aloud your thoughts - no matter if they're negative or positive, all of your interpretations will be very helpful for the development of our product. We want to hear your intentions, what you're trying to do, and their motivations.
So the scenario we want you to imagine yourself in is this- you are a student in a group of 3, and you're collaborating on a Human Computer Interaction assignment, which largely involves simple web technology files such as html, js and css.
We'll send you the URL over. So start the screen sharing, and we'll adjust the resolution of the web page for you. The webpage isn't exactly responsive as of Version 1.

Tasks - Say what to do not how to do it

- Don't answer questions for them. Ask them what they think it might do. Direct them to think
- Watch out for a number of errors made.

Task 1
Hypothesis: The goal of the site is to help users
Task: Free exploration of the web page. Timing of how long it takes for them to discover the drives (exploratory free use).
Prompt: [The user should be on the main landing page of the webpage]. Have a look at the webpage, try to interact with it just like how you would when looking for a site to help you with an assignment, and tell me what you are thinking. **[Follow up]** So where are you at right now, and tell me what your first impression of the site is.

Task 2
Hypothesis: Users may miss the blue dot next to certain files, indicating these files are related to the currently selected file.
Task: Identify the files that are related to index.html
Prompt: [Deselect index.html] Find the files that index.html depend on. **[OR]** After clicking index.html tell me what you see.

Task 3
Hypothesis: Users will be able to share the file easily, certain users may struggle with selecting the appropriate drive to share to.
Task: Share the index.html file to HCI Assignment 3
Prompt: Try sharing the Completed index.html file to the HCI Assignment 3 drive.

Task 4
Hypothesis: Users may find it difficult to initially identify what the files are specifically related to the tasks that are due tomorrow.
Task: Identify the tasks that are due tomorrow, and specifically the files related to them. Identify the progress of these files.
Prompt: Okay so find out what's due tomorrow? **[Follow up if does not comment]** Can you see what are the details of these tasks?

Task 5
Hypothesis: User may be confused with shared with user or shared with drive.
Task: Check what drives and users a file is shared with..
Prompt: Can you locate which file has been shared externally outside of your My Drive?

Task 6
Hypothesis: Users may be confused with the additional options presented when sharing a file. They may not know what the related files are or what a related file means. They also may forget how to share efficiently without clicking the wrong buttons.
Task: Share the index.html file with its related files to 303 project drive. This time the index.html file is not complete and needs urgent attention. It is due for the task tomorrow.
Prompt: [They are initially on another drive, not My Drive]. Lets say, you want to share the index.html file with the 303 project team. The index.html is not complete and needs urgent attention - it is due tomorrow. Can you also share its related files as well?

Questionnaire

1: What are your overall impressions of the website?
2: If you had to give it a grade from A to F, where A was exemplary and F was failing, what grade would you give it and why?
3: Name three words or characteristics that describe this web site.
4: What are the three things you like best about the web site?
5: What are the three things you like least about the web site?
6: If you could make one significant change to this web site, what change would you make?
7: With this system, will you be more organized with your assignments? What features support this?
8: What are your impressions with the calendar? Do you find that it will help you oversee your deadlines?
9: The following questions are to rate from 0 to 10, 0 being the worst and 10 being the best.
- Do you find the calendar helpful for your group assignment needs?
- Do you find the files that relate to your selected file helpful?
- Do you find the file tags useful?
- Is the share feature useful to your group assignment needs?

Raw Testing Results

Disclaimer: quantitative data and other results recorded are influenced by participants having to speak their thoughts out loud whilst they perform actions on our webpage.

P1 = participant 1
P2 = participant 2

Task 1
P1: User does not notice My Drive first. Notices the Shared Drives first. In order of notice:

1. First impression: meant to be a shared drive between different group members. First notices the shared drives on the side 303 project 2 and down. Assumes they are for assignments.
2. Clean. Not cluttered. Doesn't feel like they have to navigate for a long time to get what I want. Can make folders very easily, not cluttered to the different shared drives.
3. Calendar -- pretty useful. You see what needs to be done. What needs to be due, etc.
4. Notices tags, what's important to do. Big, easy to navigate.
5. Massive white space in the middle: looks plain. 5 seconds delay, before noticing the share bubbles.
6. Doesn't notice you can click My Drive, is surprised when clicks it.
7. Looks complicated. Not too friendly. Might be a better way to do this. Cards would look nicer.
8. "Can assign tasks to calendar…."
9. Doesn't know what the tasks are (SOFTENG 111 and 250) because the naming was confusing? Own thoughts: so putting an icon might be better.

Took 97 seconds to click on My Drive

P2: In order of notice:

1. Notices left nav bar and then checks out the top navbar search feature.
2. Checks calendar tasks.
3. Checks the middle section.
4. Doesn't notice that you can click MY DRIVE...takes a while to get files.
5. Took fairly quickly to decipher each element under 5 seconds

First impressions: this is good at telling what progress is going on for each file. Calendar, tasks and stuff, pretty useful. Likes the orange highlighting. Shows you what files you have to submit…"probably". Notice the blue dots by herself.
Took 58 seconds to click on My Drive

Task 2

P1: Tells me about each of the files, can see that index.html is completed. Confused with lock tag's meaning. This user did not understand how html and css files were related so they struggled with this prompt. Not sure what that is, was pretty confused. Eventually understands that it's a part of style.css and index.js. They looked at the details pane and not the blue dots, however we told explicitly what else they noticed..they had clicked 5 times on the file to see a difference (the blue dots). Takes 5 seconds to notice the blue dots, after being signified.
P2: Finds through the details pane. Notices the blue dots helps showing the related files. But we have to explicitly imply towards it. Finds in 10 seconds, through details panel. Takes 20 seconds to notice the blue dots.

Task 3

P1: Wasn't unsure if they could select more than one tag, because they could see that you have more than one tag to the file. Didn't know the actual format for the due date. Not sure if options are optional. Doesn't understand what is share related files. Made the correct assumption in the end, but was hesitant. They had the tendency to check straight away the

other shared drives to see if it was shared...the confirmation pop up was not enough. Took 3 minutes to talk through and complete the whole operation.
P2: Doesn't like how you have to type the date in. "Why do I have to tag this when sharing?" Took 2 minutes. Unsure of tasks and did not like that there was no easy date picker.

Task 4
P1: Highlights what is specified by the task, but was unsure whether it was a task. Confused what urgent meant - "no one started it or it's due very soon". So this tag is quite ambiguous. Understood that the dark blue meant today. Didn't comment on the group symbol. Took 5 seconds to determine today's date. Took 10 seconds to notice tasks are clickable and notice that the files are highlighted.
P2: Doesn't notice that dark blue is today. So thought that hand in brief was due.
Can see that it's in progress. Does not notice that the dark blue meant today, instead went for Friday (the day of the testing was Thursday). Finds the files due tmr in 5 seconds. And finds the progress of the file in 3 seconds.

Task 5
P1: Doesn't really notice the people to share to, thinks it's only for other individual people only. "Use a different symbol for groups and individuals separately". He never properly looked at the user bar and assumed they were just shared individual users. After a long while he noticed the shared drive button/icon. Took 2 minutes with help to notice.
P2: Couldn't find it. But looked through the tags. Took a while. "You would think that was a person." Took 1.5 minute to notice style.css was shared with a shared drive. Notices only the shared users at first. Though the shared drive icons were individuals.

Task 6
P1: Took 1 minute. Easily went through all the options, and was a bit confused with the tasks assignment with the sharing. Most of the time was taken by manually typing in the date.
P2: Took 45 seconds, most of the time took with typing in manually the due date.

Questionnaire

1: What are your overall impressions of the webpage?
P1:

- Nice. Simple.
- University work -- lots of projects, documents, you need somewhere to shelve somewhere nicely. But this system was really nice and clean and I could access it really easily and fast.
- Due dates are nice (I think). The view was OKAY but wanted to look at more of an expanded view, easier to comprehend.
- Clean overall.

P2: I like how you can track the tasks on the side. I like how you can see the progress of each file. Interesting she said about the people. Group them differently? If they're not people. Looks good.

2: If you had to give it a grade from A to F, where A was exemplary and F was failing, what grade would you give it and why?
P1: Personally hasn't used much cloud data services. But because this was made for university work, it makes life easier compared to google drive, you have to scroll for ages Likes the search bar
P2: A probably. Minus marks because it wasn't responsive.

3: Name three words or characteristics that describe this web site.
P1: Straight forward, sharing is easy, although such a small box for options would be a problem. Clean. Convenient.
P2: Colourful. Useful (?) tentenivelty, the search button is useful though. Aesthetically pleasing.

4: What are the three things you like best about the web site?
P1: Liked navbar easy to navigate between the different files because you have to go back and forth the folders, etc. Simple sharing, likes how you can add tasks really easily. Super organised, the calendar section.
P2: Layout, initiative. Like the tasks on the side, likes how they highlight to the things that they're related to.

5: What are the three things you like least about the web site?
P1: The middle section. Imagine you have a lot of files, you have to scroll constantly. Better if there were better types of format for viewing.
P2: Resolution of the webpage should be smaller. Was confused what the purposes of the shared drive were, wasn't sure if they were folders and stuff you could put into.

6: If you could make one significant change to this web site, what change would you make?
P1: The middle section → cards, icons, more presentable in that way.
P2: How do you upload and download files? Delete files, etc. Share them, do you have messages? The tags are not clear. Don't like the person is a drive, how are you supposed to know. Everything seems to be in the root folder.

7: With this system, will you be more organized with your assignments? What features support this?
P1: More organised definitely. Easy access to the assignments I have to do. Drag and drop the document straight into the shared drive without the sharing pop-up. Let's say you were transferring so many files, this would be tedious. Click on the file, share, go back and check, etc… Sharing to a specific person is okay though.
P2: Yeah, can share with group members and tell them not to touch my files. Wasn't sure if the tasks were shared tasks, etc.

8: What are your impressions with the calendar? Do you find that it will help you oversee your deadlines?
P1: I think so. Normally they used google drive and google calendar with two separate tabs.
P2: You can look at it all in one tab, more convenient. (does not mention related files).

Yes.

9: The following questions are to rate from 0 to 10, 0 being the worst and 10 being the best.

Do you find the calendar helpful for your group assignment needs?

P1: If your group is on this, the first thing they see is the calendar, they'll know when and what needs to be done. Need more details of what needs to be done, rather than only just showing the files that are related. Show the files that only you need to be done. 7

P2: 10 if i checked my calendar regularly.

Do you find the files that relate to your selected file helpful?

P1: Yes, in the long run for better organization. But we had to explain the use of it, the chances of that happening is, I guess something like mass uploading uni students have a lot of stuff to do 8

P2: If they're not in the same folder or something it would be useful.

Do you find the file tags useful?

P1: Alright. Option to make custom tags is much better though, tags may mean different things for other people, etc. Useful for shared drives. 9. But if you can edit, 10

P2: Wanted to change the tags on a file. Yeah, would be useful, to see who hasn't done their work. 10

Is the share feature useful to your group assignment needs?

P1: 10 Yes. EASY TO NAVIGATE

P2: With code files, you'd probably be doing that on git or something. Personally I would use git for that. But for other files I'll use this. And I don't know how to share multiple files together.

Various critical incidents included the webpage being not responsive and appearing differently on the participant's screen, and different browser settings which result in different input visuals when sharing a file. There are no implications from this as they are out of scope for the prototype.