

COSC368 ASSIGNMENT 1

TutorTech Ltd. Application

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Executive Summary/Abstract

This report aims to establish the reasons why your company should take into consideration the interface design we have proposed. With the issues currently prevalent in the world such as the global pandemic as a result of COVID-19, there has been a strong shift to the use of online resources to achieve and complete tasks such as communicating and working with people as people can not work face to face. Many educational institutions have resorted to online communication in order for their users to achieve their tasks, this report provides insight on how a proposed system design can be used for managing and coordinating online access to tutors and instructors as effectively as possible.

Introduction

The designs presented in this report will assist you in finding an interface that is both effective and reliable for managing and coordinating online access to tutors and instructors. The designs aim to provide an efficient and non-time consuming way for users to carry out their tasks within the interface, using 'Task Centred System Design' designs will be based around tasks that users will want to carry out in the interface and not based on what the interface can do. We believe the simplicity and clarity of our designed interface will benefit many users as they will be able to carry out their desired task without spending time learning how to use the system. Our designs were created with the knowledge that the completion of tasks within the interface for the users should be as simple and as clear as possible but still satisfy the full requirements listed by TutorTech Ltd.

User and Task Identification

There are three main types of users who will be using this system; Students, Tutors and Instructors.

Students will be the most important group of users as they will be the largest group using this system. The primary reason students will use this interface is to receive help from tutors and/or instructors. The system should accommodate all types of students including those with disabilities and learning impairments. An example of a student is Bob who is a first year undergrad student at UC studying computer science.

Tutors will be the second most important group of users, although the number of students is extremely likely to be greater than the number of tutors the system still needs to be designed so that the completion of tasks for tutors is straightforward. Tutors will use this system to interact with students and provide necessary assistance to them which is the main reason they will use this interface. An example of a tutor is Mike is a postgrad student at UC who is tutoring COSC121.

Instructors will be the least important group of users as they will be the smallest group using this system. The system still needs to ensure that the tasks needed to be completed by the instructors are straightforward to carry out. Instructors could use this system to view the active times and number of participants in a session to determine what the times with the highest number of students are. An example of an instructor is Sam who is an academic at UC and is the course coordinator for the course COSC121.

There are a number of different tasks the three user types will want to complete in this interface, by ranking these tasks in terms of their importance and frequency we can establish designs that ensure the completion of these tasks are made as simple and as quickly as possible in the interface. These tasks are listed below, we have three tiers; task categories, tasks within those task categories and scenarios within those tasks respectively, the numbers next to each listed category and task represent the importance of that particular category or task, with 1 being the most important.

1. Support

N1. Tutor wants to help students

- N1A) Tutor Mike wants to respond to private messages he has received from students overnight.
- N1B) Tutor Mike wants to accept a video request by Student Bob asking a lab question.
- N1C) Tutor Mike was to create a live video session for his STAT101 tutorial.

N2. Student wants help from a tutor

- N2A) Student Bob wants to send a private message to one of his tutors.
- N2B) Bob wants to request help in the form of a video call with one of his tutors.
- N2C) Bob wants to join a live tutorial session led by tutor Mike.
- N2D) Bob is in the queue waiting for a tutor (video call) but no longer needs help so wishes to cancel his request.

N3. Student wants to know the tutors availability

- N3A) Student Bob wants to know what time his next STAT101 tutorial is.

N4. User wants to see their messages

- N4A) Student Bob wants to see all his messages with questions he has asked tutors in the past.

N5. Student wants to select a course to receive help in

- N5A) Student Bob has just finished talking with the STAT101 tutor Mike and now wants to communicate with the MATH120 tutor John.

N6. Student wants to be notified of any events

- N6A) Student Bob wants to know of any updates associated with his STAT101 tutorial which was supposed to start 10 minutes ago.
- N6B) Student Bob wants to see if any of his tutors have responded to his messages.
- N6C) Student Bob wants to get relevant notice to the tutorial of a course.

N7. Student wants to view dates of classes

- N7A) Student Bob wants to know what day his next SCIE101 tutorial is.

N8. User wants help to understand the system

- N8A) Tutor wants to know how to make a live classroom session.

2. Video calling

V1. Student wants to communicate with the tutor and vice versa

- V1A) Student Bob/Tutor Mike wants to mute/unmute his microphone and or turn their camera off/on.
- V1B) Bob wants to type his question in a chat for the tutor Mike to read.
- V1C) Student John wants to respond with a 'yes' vote to Tutor Mike's poll question.

V2. Student/tutor wants to share

- V2A) Bob wants to share his screen with his Tutor Mike.
- V2B) Tutor Mike wants to switch his camera from his document camera to his webcam for his student's perspectives.
- V2C) Bob wants to upload a file/photo to the chat for Mike to see.

V3. Student and/or tutor wants to end/leave the session

- V3A) Bob no longer needs help or the tutor can not give help and wants to leave the call.

V4. Tutor wants to see who the participants are

- V4A) Tutor Mike wants to see how many people are in the call.
- V4B) Tutor Mike wants to see feedback from students when he is testing his microphone.

V5. Student/tutor wants to adjust their perspective of the call

- V5A) Bob wants to full screen to see the tutor Mike's view better.
- V5B) Bob wants to adjust the volume of the tutor Mike.
- V5C) Bob wants to change to the main screen (if tutor has multiple screens enabled)

V6. Student/tutor wants to know the duration of the call

- V6A) Student Bob/Tutor Mike wants to know how long his private session has lasted when considering helping the next student in the queue.
- V6B) If time is up, a pop-up alert will appear, and Bob must wait until Mike can add more time to close the alert

V8. A student raises hand in class tutorial.

- V8A) Student Bob has a webcam, mic and sharing screen disabled by default. To ask a question (unmute, ...), he has to raise his hand.
- V8B) Tutor Mike decides when it is time for questions and accepts Bob's raise hand request. Bob is then unmute.

3. Messaging

M1. Student wants to communicate with the tutor and vice versa

- M1A) Bob wants to type his question for the tutor Mike to read.
- M1B) Bob wants to upload a file/photo to the chat for Mike to see.
- M1C) Bob wants to record a voice memo for Mike to hear.

M2. Tutor wants to switch between students to answer multiple questions

- M2A) Tutor Mike is currently helping student Bob but has received a new message from a student John and wants to view and help him now instead.

M3. Tutor wants to end a conversation

- M3A) Tutor Mike has solved the question of student Bob and so wants to lock the conversation so it can only be viewed.

M4. Tutor wants to remove a conversation from his inbox

- M4A) Tutor Mike has his inbox filled with messages that he has previously solved and wants to remove them.

4. Logging in

L1. User wants to log in

- L1A) A student Bob wants to Log in.
- L1B) A student Bob has forgotten his password and wants assistance logging in.
- L1C) student Bob wants to save their password so he doesn't have to type it in again.

L2. User wants to logout

- L2A) A student Bob wants to logout.

5. Instructor Administrative tasks

I1. Instructor wants to post an update

- I1A) Instructor Sam has to cancel the next tutorial session and wants to post an announcement to everyone in the course.

- I2. Instructor wants to view analytics of students and tutors
 - I2A) Instructor Sam wants to see how many hours the course's tutors have spent in class tutorials.
 - I2B) Instructor Sam wants to see average hours spent by students in a subject.

- I3. Instructor wants to adjust the schedule for a course
 - I3A) Instructor Sam creates a timetable for COSC368 tutorials and help sessions for the assignments after finishing negotiations with all COSC368 tutors.
 - I3B) Instructor Sam wants to edit the COSC368 tutorial on Mon to another because tutor Mike is sick.

Prioritisation of User Tasks

Logging in

L1.

High importance, medium frequency, .

Support

N1) Tutor wants to help students

The system is built around the task of tutors and students interacting, so this task is of highest importance. The frequency of this task being performed is high, and will be the most frequent task performed as a student could request help from a tutor after having already received help.

N2) Student wants help from a tutor

The system is built around the task of tutors and students interacting and so this task is of highest importance. The frequency of this task will be high as the student will use the interface to carry out this task potentially multiple times at once.

N3) Student wants to know the tutors availability

This task is of medium-high importance as the student would want to know if a tutor is available or not before deciding what tasks to perform next. The frequency of this task is medium as a student will do it as soon as they log in and infrequently afterwards throughout their time using the interface in a session.

N4) Student wants to see messages with their Tutors and vice versa

This task is of medium importance as the student and tutor will want to check for any new messages. The frequency of the task being performed is medium as a user will likely check their messages as soon as they log in and infrequently afterwards throughout their time using the interface in a session.

N5) Student wants to select a course to receive help in

This task is of medium importance as it is possible that a student will use the interface to communicate with a tutor in one subject and then with another tutor of a different subject. The frequency of this task being performed is low as a student will not always perform this in a session.

N6) Student wants to be notified of any events

This task is of medium importance and the frequency will be medium-low, the student will want to know what events have been added to the calendar.

N7) Student wants to view dates of classes

This task is of medium importance and the frequency will be medium, the student might want to check the time of the next class after finishing a session or check the time of another class before entering a session.

Video calling

V1. Student wants to communicate with the tutor and vice versa

This task has the highest importance as this is the main objective the student will want to complete in the interface, the frequency is high because every time the student uses the interface the intended use is to receive help from/communicate with a tutor.

V2. Student/tutor wants to share

This task has a high importance as the student and tutor are very likely to share material associated with what they are discussing within the call, the frequency will be medium-high as every session the student and tutor might want to share multiple things.

V3. Student and/or tutor wants to end/leave the session

The task has a high importance as the tutor will want to end the session at each of their designated times, after the tutorial session has finished and the student will want to leave the session after receiving help. The frequency will be high-medium, since they will most likely leave the session every time.

V4. Tutor wants to see who the participants are

The task has a medium importance as the tutor might want to see how many students are currently online to give them a rough estimate of time needed to help each student. The frequency will be low as the tutors will do it occasionally in a session.

V5. Student/tutor wants to adjust their perspective of the call

This task has a low importance and the frequency will be low-medium, as the student and tutor might want to adjust their interface arrangement by making their screen larger or adjusting their volume.

V6. Student/tutor wants to know the duration of the call

This task has a low importance as the user will have a low-medium frequency as they are looking at it infrequently throughout the call.

V8. A student raises their hand in class tutorial.

This task has medium importance as the students will do this to get the tutor's attention. The frequency of this task is medium as students could do this several times throughout a call.

Messaging

M1) Student wants to communicate with the tutor and vice versa

This task is of high importance because the student will want to get help from the tutor. The frequency of this task is high as students will be frequently sending messages to a tutor and a tutor will be frequently responding.

M2) Tutor wants to switch between students to answer multiple questions

This task is of high importance as the tutor will need to answer student's questions. The frequency of this task will be high especially when a tutor wants to help multiple students at the same time.

M3) Tutor wants to end a conversation

The importance of this task is medium as the tutor would want to close a conversation to avoid clutter. The frequency is medium as the tutor will do this when a query has been solved.

M4) Tutor wants to remove a conversation from his inbox

This is low importance and the frequency will be low, as the tutor will not always want to clear their inbox of messages.

Instructor Administrative tasks

I1) Instructor wants to post an update

This task is of medium importance and will also have a low frequency as it is highly likely that an instructor will use the interface to post an update about their courses however the number of times an instructor will use the interface will be significantly less compared to students and tutors.

I2) Instructor wants to view analytics of students and tutors

This task is of medium importance, and will have a low frequency. The instructor will want to know the engagement between tutors and students on perhaps a weekly basis, however they will not always view the analytics.

I3) Instructor wants to adjust the schedule for a course

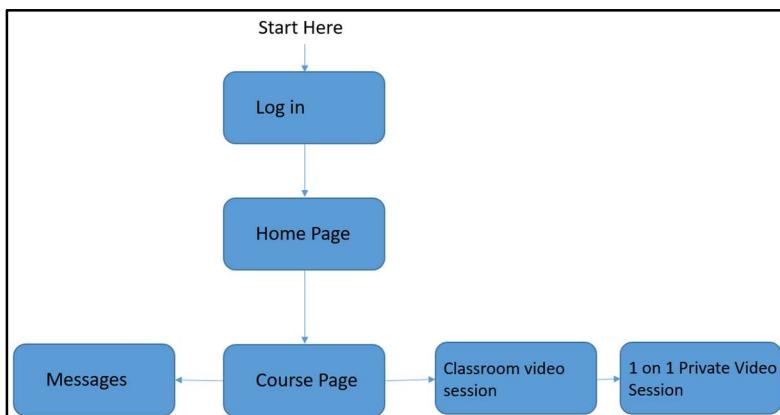
This task is of medium importance, and of extremely low frequency. The instructor will need to do this initially and very infrequently throughout

Preliminary design alternatives and their rationale

Navigation

We determined two separate ways of navigating the system that we saw as satisfactory. Both designs share aspects but differ in the way it handles video sessions, specifically how to enter a private student-tutor session upon requesting help as a student. Navigating the system is identical at the start as both tutor and student have the user login and is redirected to the homepage. Once at the home page the user is able to move from the home page to the course page. The course page has the option to go to the messages page. The difference between the two designs occurs at the course page.

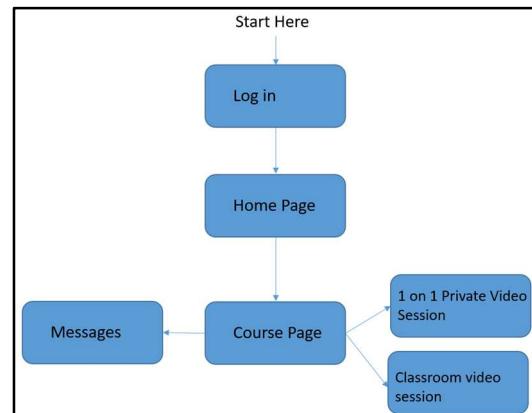
Navigation Alternative 1



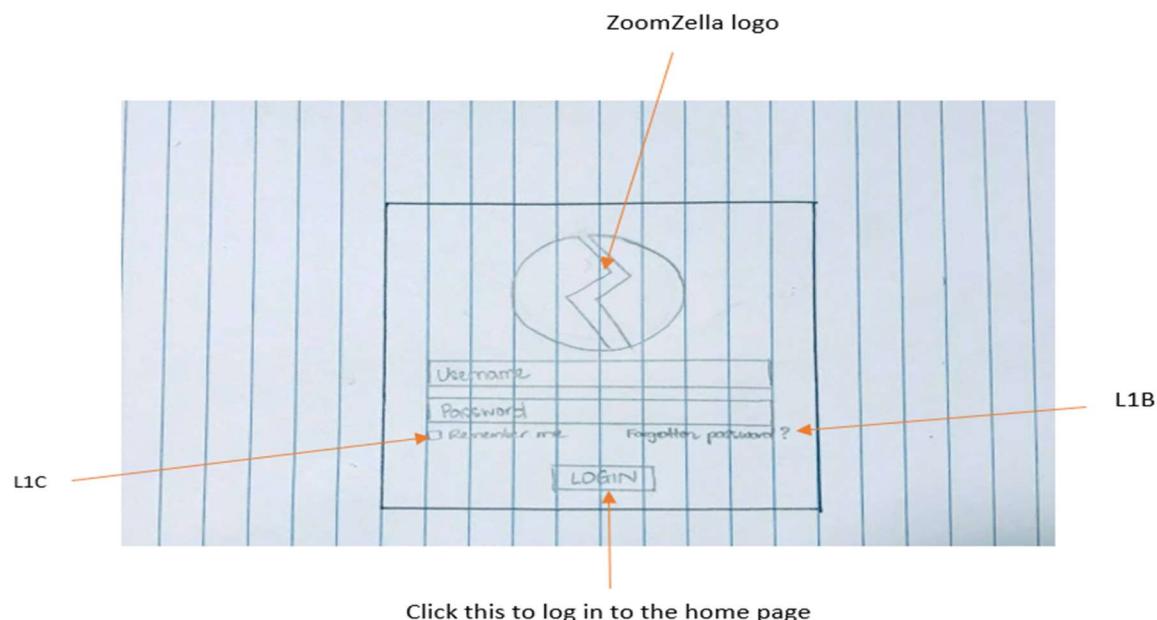
In the first alternate design the classroom session can be opened from the course page. This classroom video session could be used as a normal tutorial session or it can be used as a waiting room for a one on one private session between a tutor and a student. A student would make a request in the classroom session and then the tutor would accept the student's request in the queue and invite them to a private video session. The recipient student would receive an invitation in the form of a popup and upon acceptance would be moved from the waiting room to the private session with the tutor.

Navigation Alternative 2

The second navigation design differs from the previous navigation as the one on one private session between student and tutor can be reached without going through a video waiting room. Instead the student will be waiting on the course page before joining the private session. The classroom video session is still available but would be used explicitly as a tutorial session.



Login



Since our design approach is about simplicity, we do not want to confuse users by adding too much in the first place. We try to keep it as simple as possible and focus only on users' security. The login is very similar to any applications and there is no need to have any other alternatives.

Since users forget their passwords quite often, we provide the “forgotten password” function to help them out. When the user clicks it (L1B), a new page appears and instructs them clearly how to reset the password. Also, we think it is best to add-on a “remember me” option to save users’ credentials so we can reduce the number of people who frequently forget their password.

A hand-drawn wireframe of a password reset form. It features a 'Cancel' button at the top left, a descriptive text block in the center, a 'Username or email' input field below it, a 'Submit' button at the bottom right, and a small orange arrow pointing from the text 'Click submit to move to the next part' to the 'Submit' button.

Click submit to move to the next part

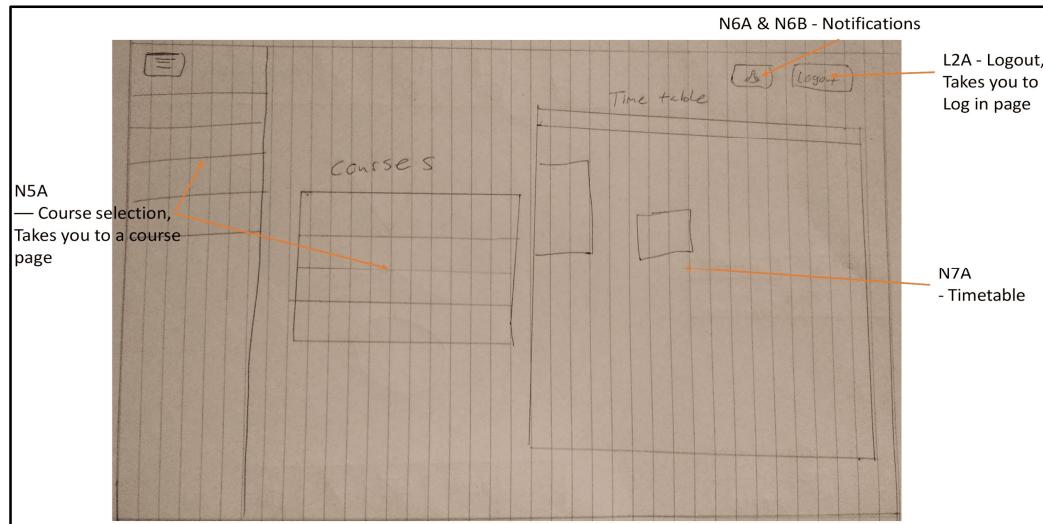
A hand-drawn wireframe of a password reset form, similar to the one above but with a success message. It includes a 'Cancel' button, descriptive text, an 'Username or email' input field, a 'Submit' button, and a message box containing the text 'Email has been sent to your email address.' with an orange arrow pointing to it.

Notification that the email has been sent to the user email address, check email to reset the password.

Home Page

Home Page Alternative 1

There are two very large and clear options relating to tasks about seeing when classes are on and choosing what class to receive help in.



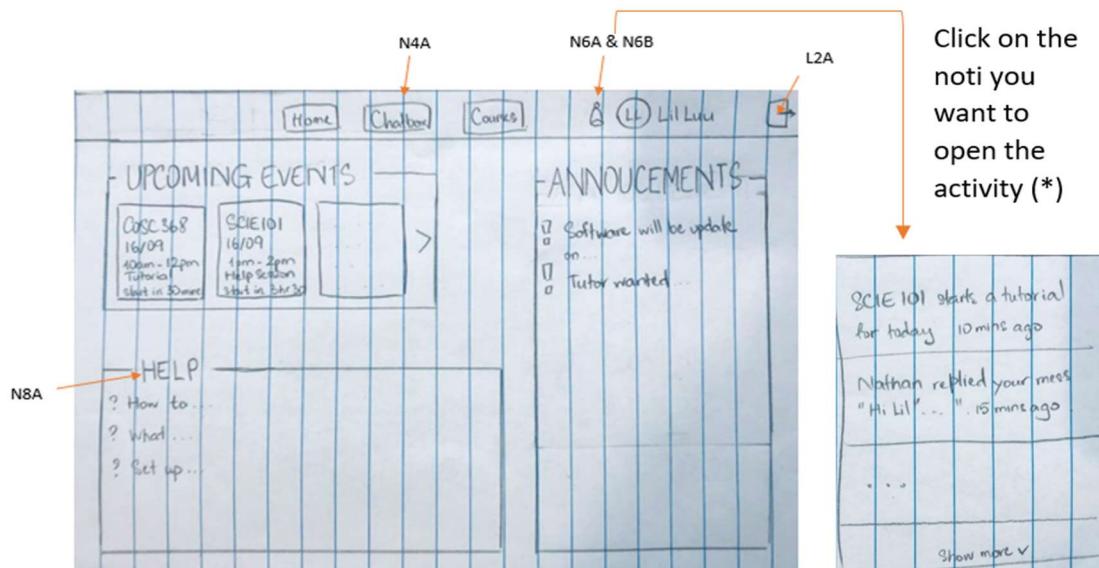
Advantage

- This design is extremely simple

Disadvantage

- Visually unappealing as a starting page in terms of identifying how to perform tasks.

Home Page Alternative 2



(*) For example if you click to the first notification, the system will redirect you to SCIE101 tutorial.

There are three main sections that people might want to update information when they log in the app. For the first time using users, they would need some help to get to know more clearly about the app, therefore, the help section might be quite necessary.

Advantages:

- Sections divided clearly and visible.
- Sections are arranged in order of importance and its frequency use via upcoming events section is regularly checked by students whenever they login to the home page to see what events are coming up.

Disadvantage:

- Home, chat and course boxes are small relative to the page meaning how to navigate and perform high priority tasks isn't obvious at first.

Course Page

Course Page Alternative 1

Student Perspective

(*) The modal window shows up at the middle of the page.
 (**) Click on the specific tutor to direct you to message them in the chat-box.

N5A

NSA

Click (*)

N2A (**)

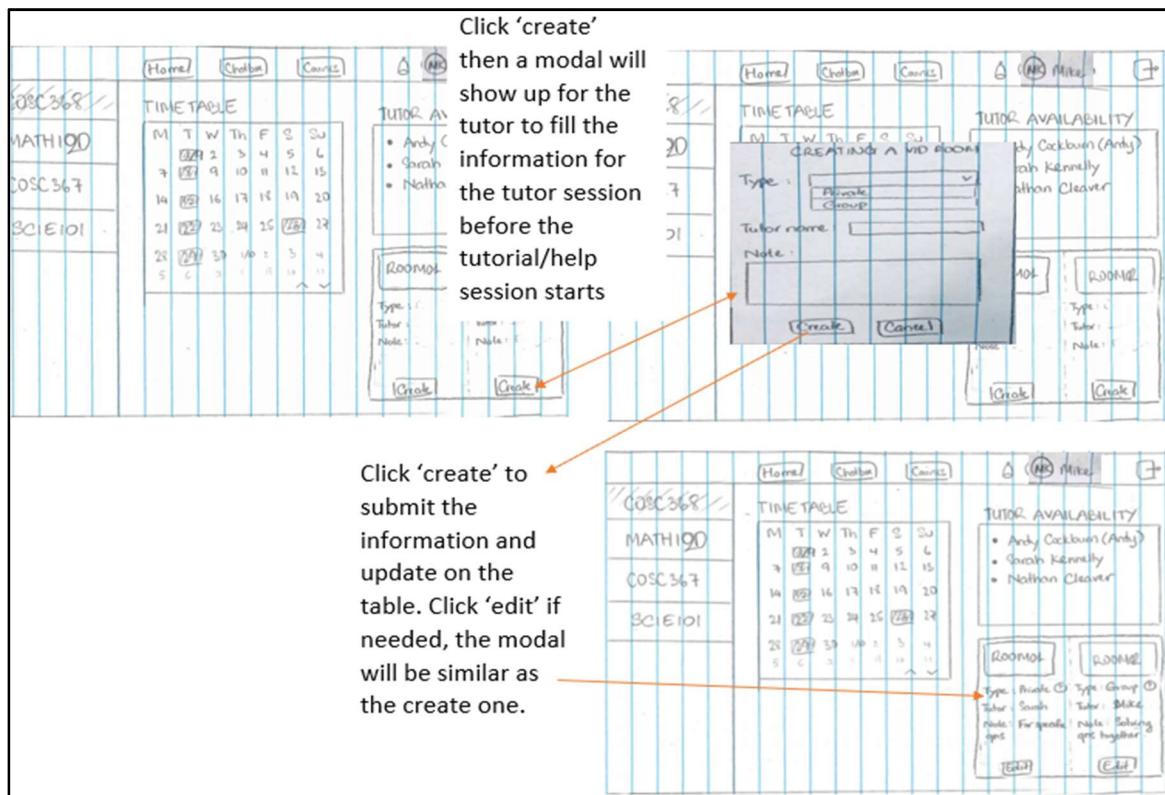
N2B & N2C

To clearly explain the meaning of type ie/ what is the meaning of group or private meeting room

Tutor Perspective

This design contains all necessary sections that inform students their timetable and ways to get help from course-related tutors. The timetable shows the estimated events of the whole course so students can handle their study more efficiently as well as manage their time better with other courses. Especially, knowing the availability of tutors might be easier for students to get help as fast as possible through the way of messaging.

The only difference between the interface of the course page in the student and tutor side is a tutor can set up the information of the rooms. Hence students will know where the private help session and the tutorials (classroom) are, who is the tutor of each room and what they need to notice before joining the session.



Advantages:

- Sections are divided clearly.
- Since symmetric design brings a neat and tidy design environment, it helps users to find elements more easily.

Disadvantages:

- The join class buttons - Room01 and Room02 (N1C) have a high priority but this is not seen as that as it is quite small compared to the others. This means it will make it harder for the user to see this button.
- Students will only think of the tutor availability section to inform which tutors are online even though they can message a specific tutor by clicking on the name of the tutor that appeared on that section. Therefore this leads to a redundant task.

Course Page Alternative 2

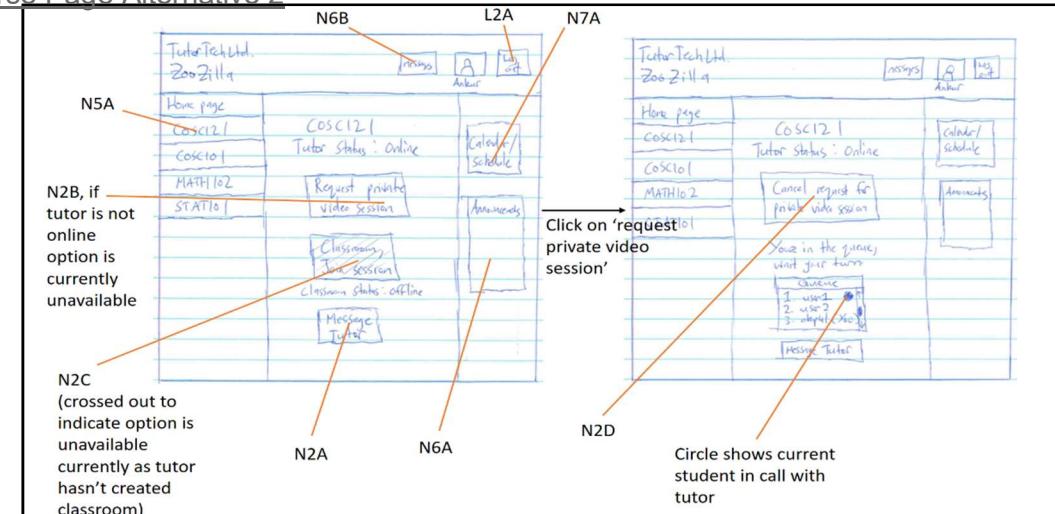
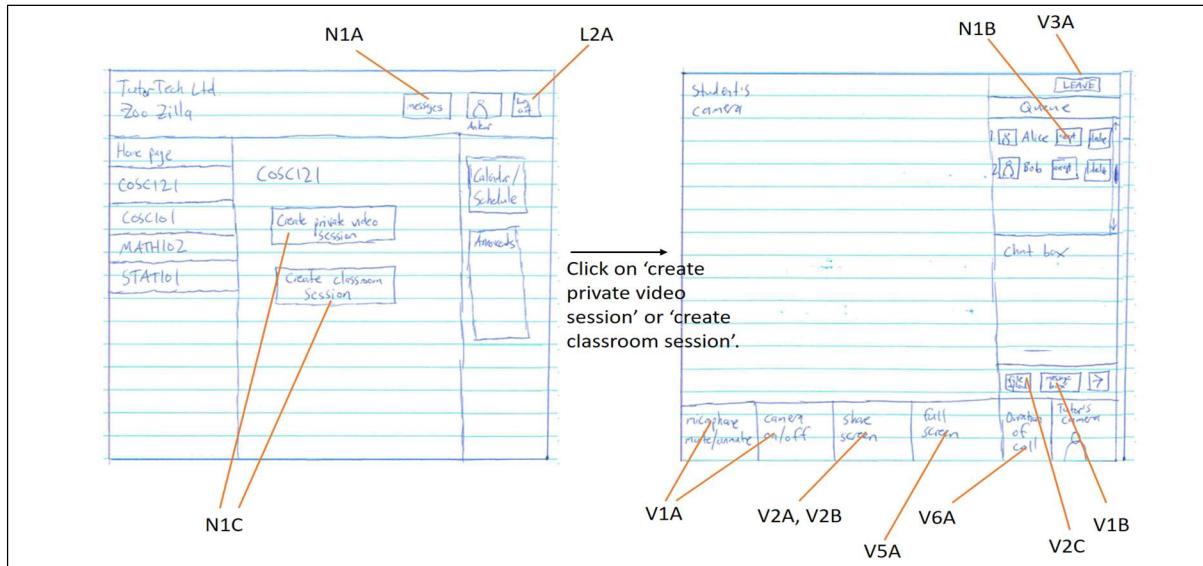


Figure: Student's Perspective of the course page

Tutor's Perspective of the course page



This course page alternative was designed such that the main two tasks (N1 and N2) identified were placed in a central location on the screen in both the student and tutor side, they appear slightly larger than the other elements on this page to emphasize that these are the main tasks that need to be carried out and should be given the highest priority on the screen.

Advantages:

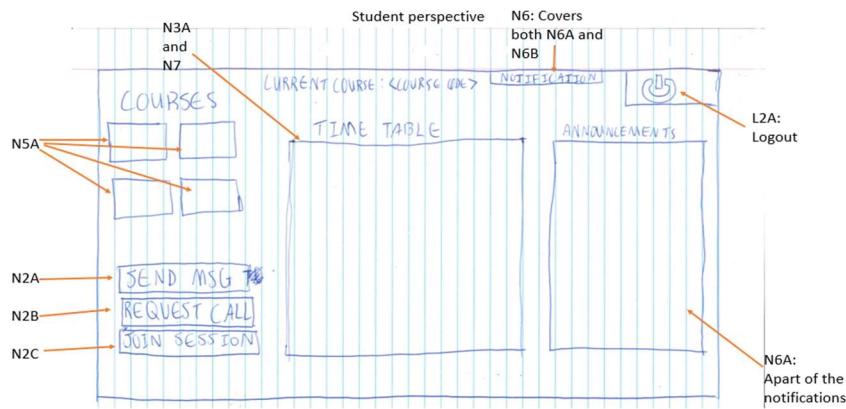
- The task is simple to carry out, the student or tutor needs to click just one button to complete their most important task
- The buttons are slightly larger so the visual search time is reduced in carrying out the main tasks
- All of the 'Support' tasks can be carried out after clicking just one button in the course page on the student's side.

Disadvantages:

- After the tutor completes their main task they will be taken to the video page and won't be able to perform other tasks if no student is currently requesting for help.
- The student/tutor could possibly click on the wrong button to complete their main task as they are quite large and close to each other.
- If the student clicks on the 'request private video session' button rapidly they might end up cancelling the tutor on accident as the 'request private video session' changes to 'cancel request for private video session' after clicking on it.

Course Page Alternative 3

The courses section was displayed like that so it would be easier for the user just by clicking on the boxes. The timetable was made quite large so it would be easier to see and the logout button was made large so it would be more visible and is placed at the top right as that's where the logout button usually is so it would make it more familiar to the user. The send message, request call and join session buttons are made large so it would be easier to click. The notification button was made small because it was not more prioritized than other tasks in the interface. The announcement section was made large enough so you can see the current and the previous announcements made by the poster.



Advantages:

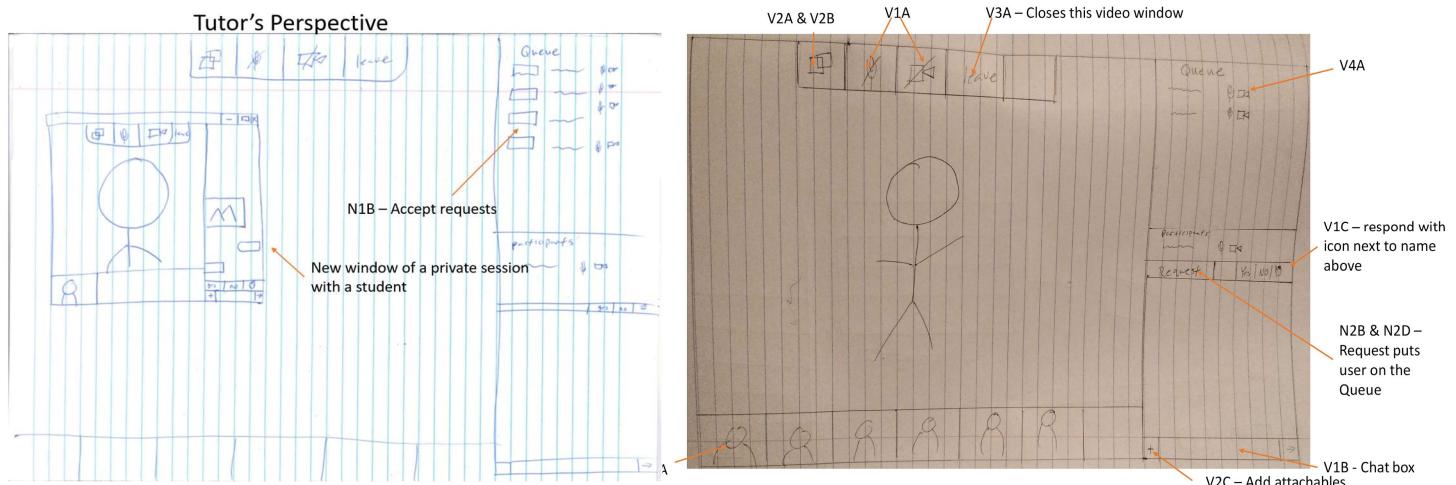
- Very simple
- Easy to see which is which
- The buttons are large enough so it's easier to click
- Messages in announcements and timetable are visible so no need to zoom in
- The log out button is away from the main buttons
- good use of space, no gaps

Disadvantages:

- Can not determine the highest priority task
- Log out button is very big so probability of clicking on it accidentally is higher
- The send message, request call and join session button are very close to each other so more likely that the user will misclick
- The send message, request call and join session do not seem like the higher priority compared to the timetable and the announcement.

Video call

Video Call Alternative 1



This design is a group video call that would be used as the classroom session in navigation alternative 1 would. The private session would be a simplified video call/chat for both students and tutors.

The highest priority task when used as a waiting room would be requesting help from a tutor and seeing the queue and so its location is top right and is very clear.

Advantages

- interaction between tutors and students is simple.
- The tutor is able to multitask by interacting with the private session as well as managing and iterating in the group session simultaneously.

Disadvantages

- when used as a waiting room for help a user is required to stay in the video call to wait for help meaning they won't be able to perform other tasks outside of the video call.

Video Call Alternative 2

Figure: Private and group video call in student perspective

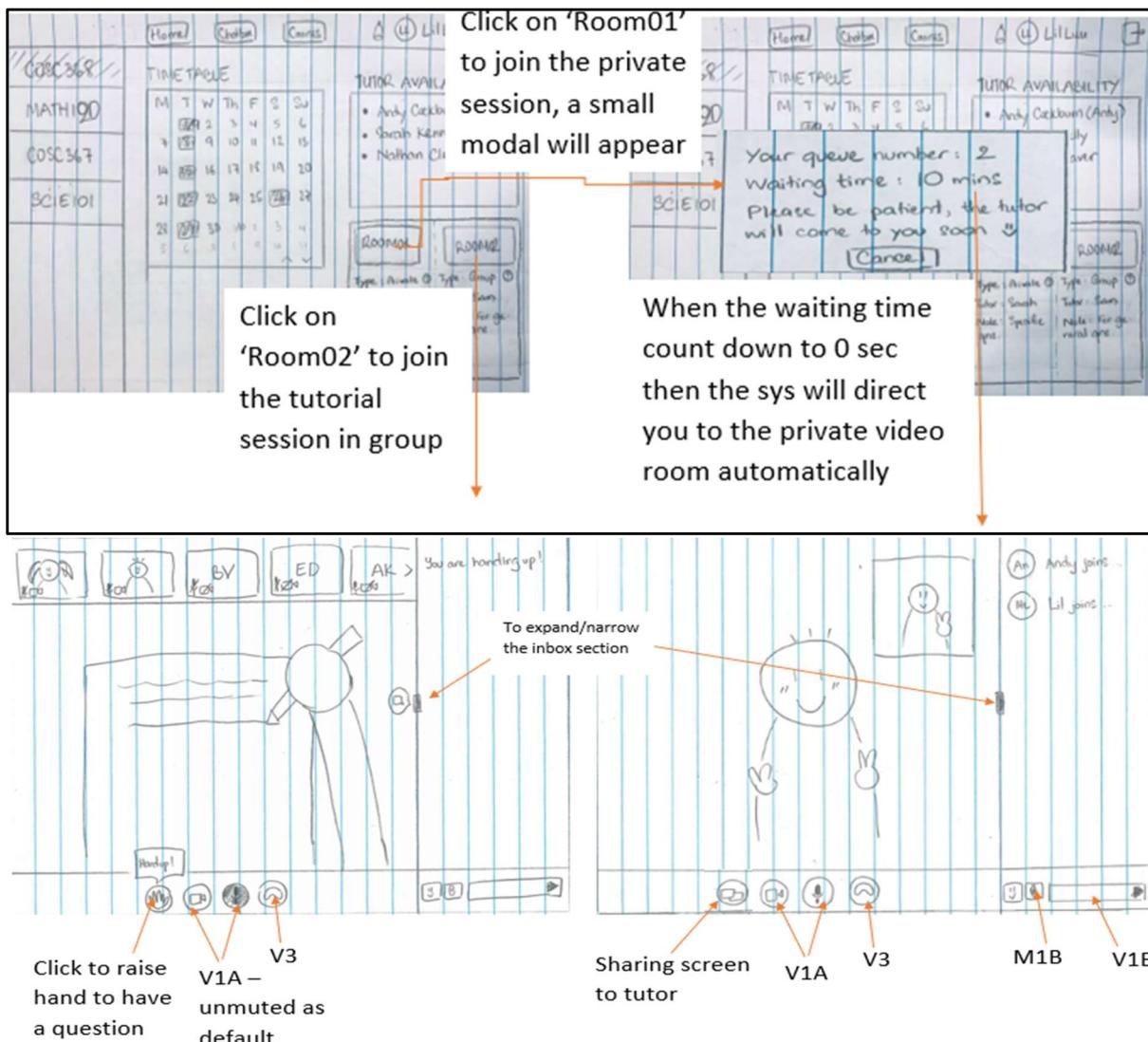
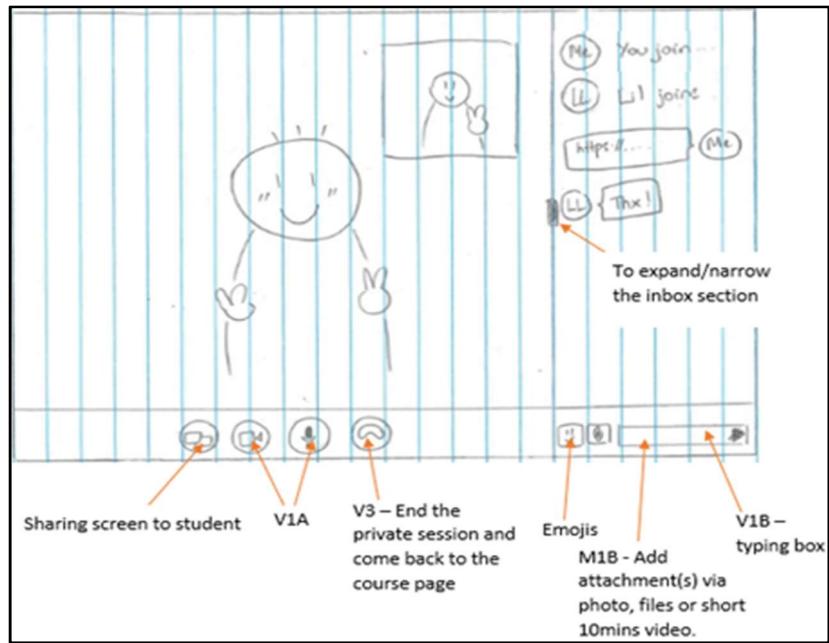


Figure: Private and group video call in tutor perspective

Private video call



Click on 'Room02' to open the classroom

Click on the name of the student to direct her/him to the private vid call

Classroom

(*) Shows who is allowed to talk or turn on the webcam when a tutor accepts the raising hand request from a student. When the tutor presses x given that the request was accepted the students mic and camera will be disabled.

The design is very similar to any video conferencing app via Messenger, Zoom and Skype (with some extra features) to bring a friendly environment to users. Therefore users can learn how to use this much quicker and be familiar within a short time.

Advantage:

- The design looks simple and easy to use due to the similarity with other video conferencing apps

Disadvantage:

- It might take time for the tutors to learn how to control the raising hands part.
- There is no information that shows who is attending and how many students in the class. Also students can not see this information.

Video Call Alternative 3

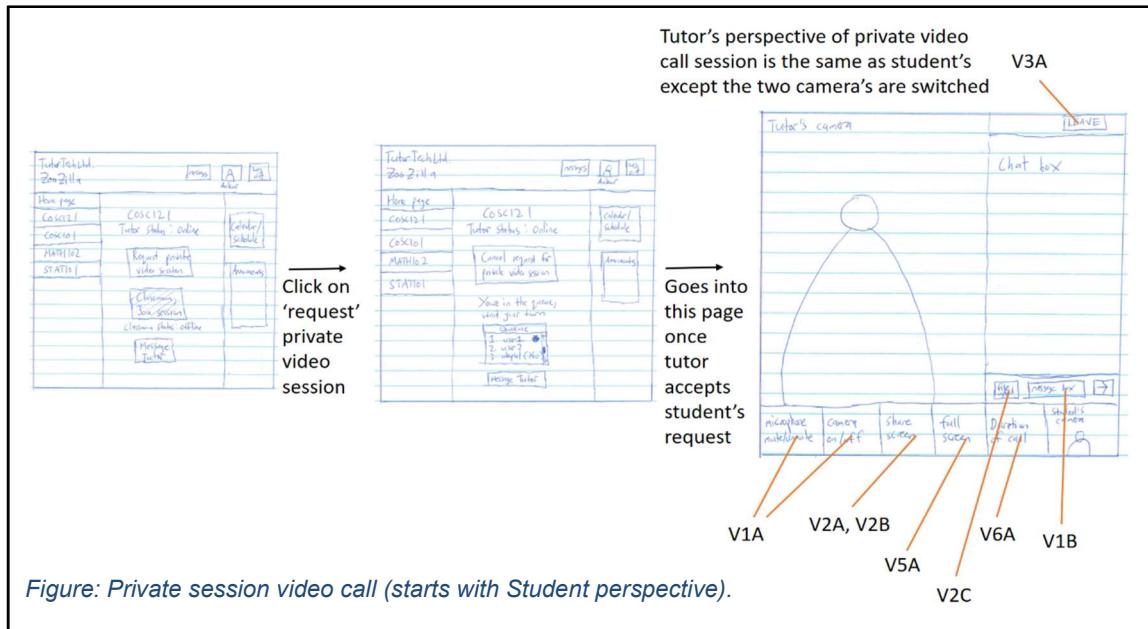


Figure: Private session video call (starts with Student perspective).

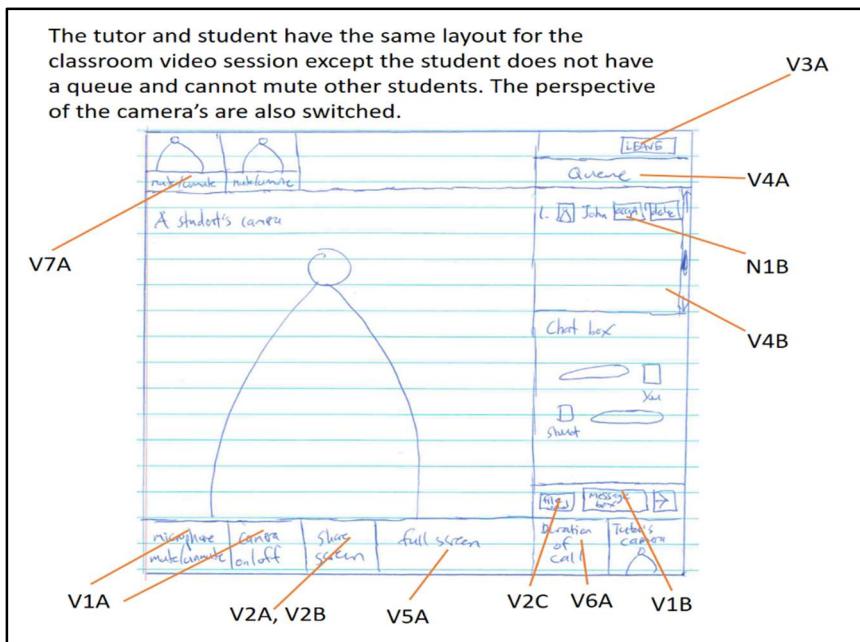


Figure: Classroom session video

The design of the video was based around familiar video interfaces such as Skype, Zoom etc with the location of elements in the video page in roughly the same locations, this was done so new users of the interface can carry out the required tasks V1 to V7 in the quickest possible time without having to spend time learning how the interface works and where elements are located.

Advantages:

- Familiarity of locations means tasks are easy to carry out by the student or tutor.
- All task options are visible on the page so users do not have to transition through multiple states to complete the task they wish to carry out.
- Tasks can be completed by clicking just one button.

Disadvantage:

- Elements along the bottom of the page are right next to each other so a user might accidentally click on a button that was not for their intended task.

Messaging

Messaging Alternative 1

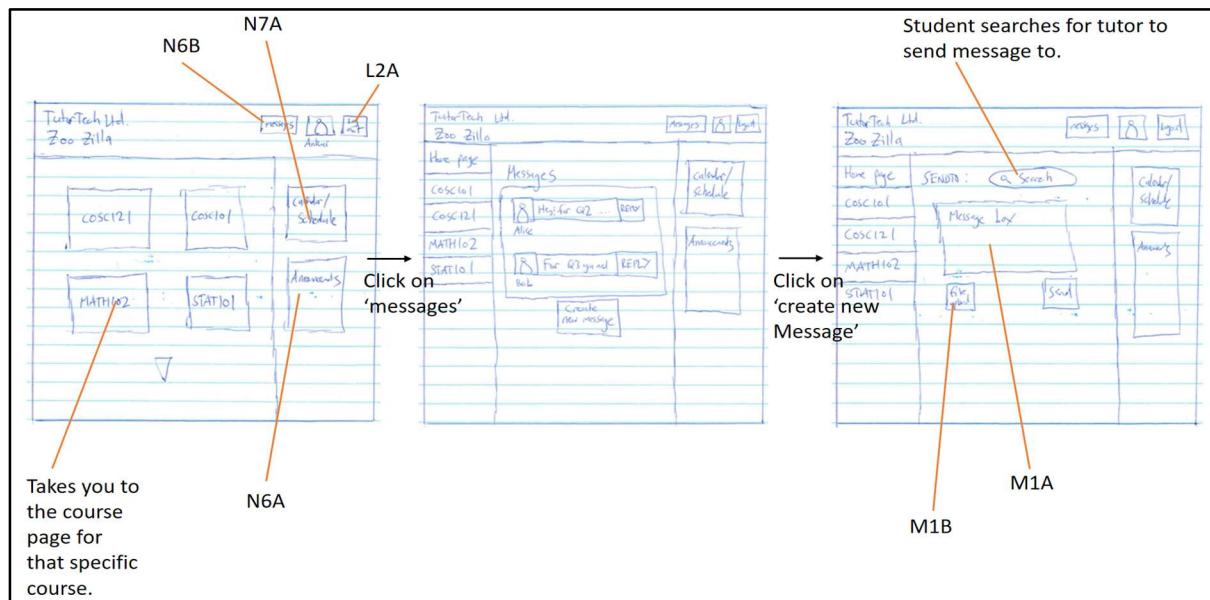


Figure: Student's perspective

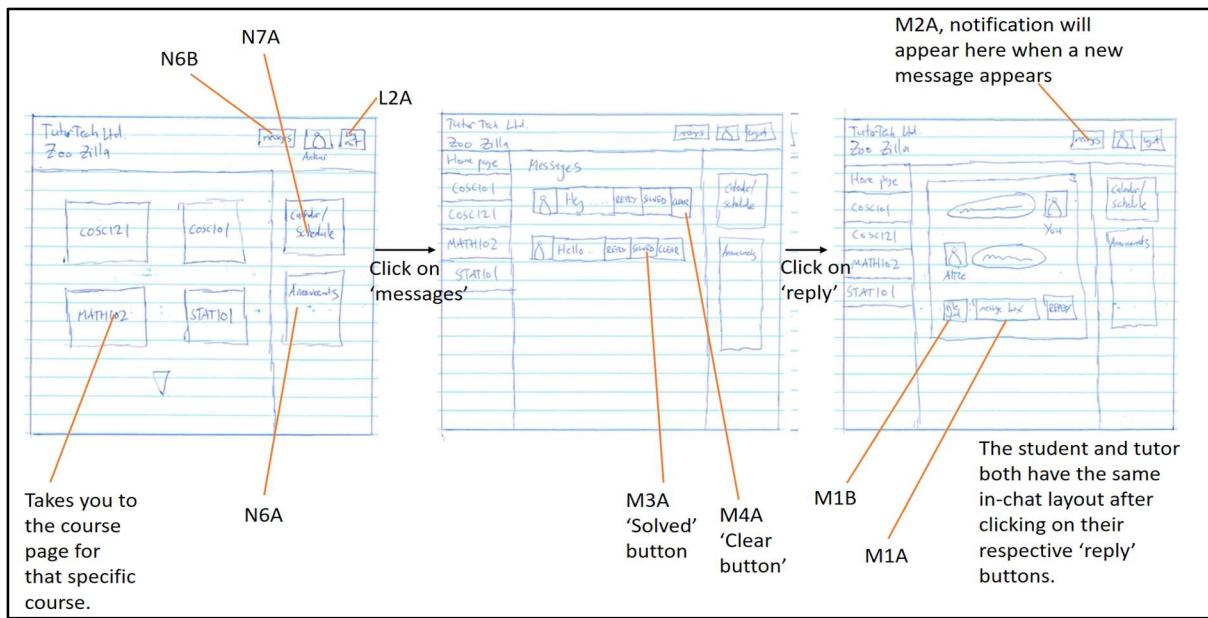


Figure: Tutor's perspective

The design of the messages page was also based around familiarity with other applications, the actual chat box has the same implementation as many other applications so the user of this interface can perform their desired task withouting having to learn how to use the system.

Advantage:

- Familiarity of locations means tasks are easy to carry out by the student or tutor.

Disadvantage:

- Tutors wanting to carry out tasks M3 or M4 might click on the wrong button as they are situated right next to each other.

Messaging Alternative 2

Figure: Student perspective

Figure: Tutor/Instructor perspective

The message part is put independently in a single page to maximize its functionalities and broaden the space for the users. Hence not only lesser the mess of the page but also

increasing the focus of the users on the main task (messaging). Also again, this design is very similar to most message platforms especially Facebook messenger. So it might not take time to get to know this part.

Advantages:

- Very simple to use and does not take time to get to know this message section.
- Brings focus on the main task.

Disadvantage:

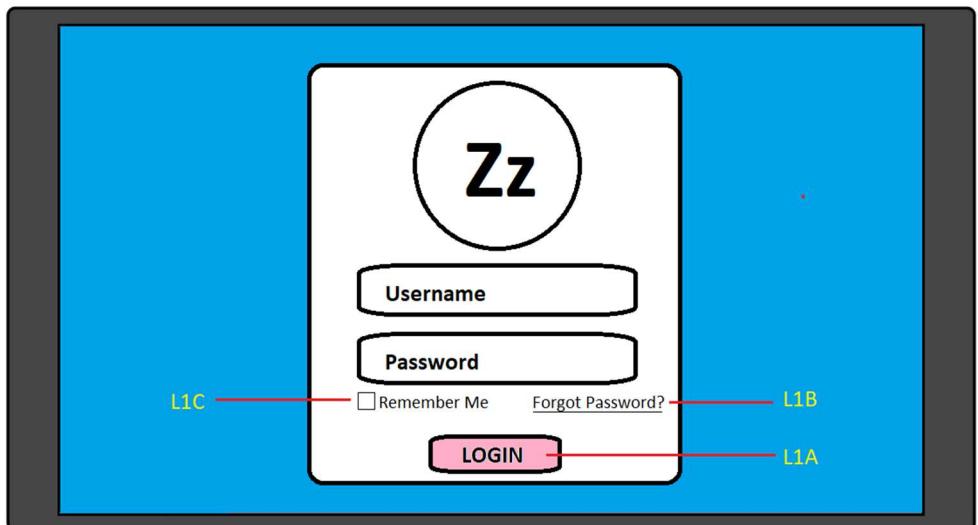
- Buttons next to the 'send' button in the message box are quite small and close together.

Primary Preliminary Design

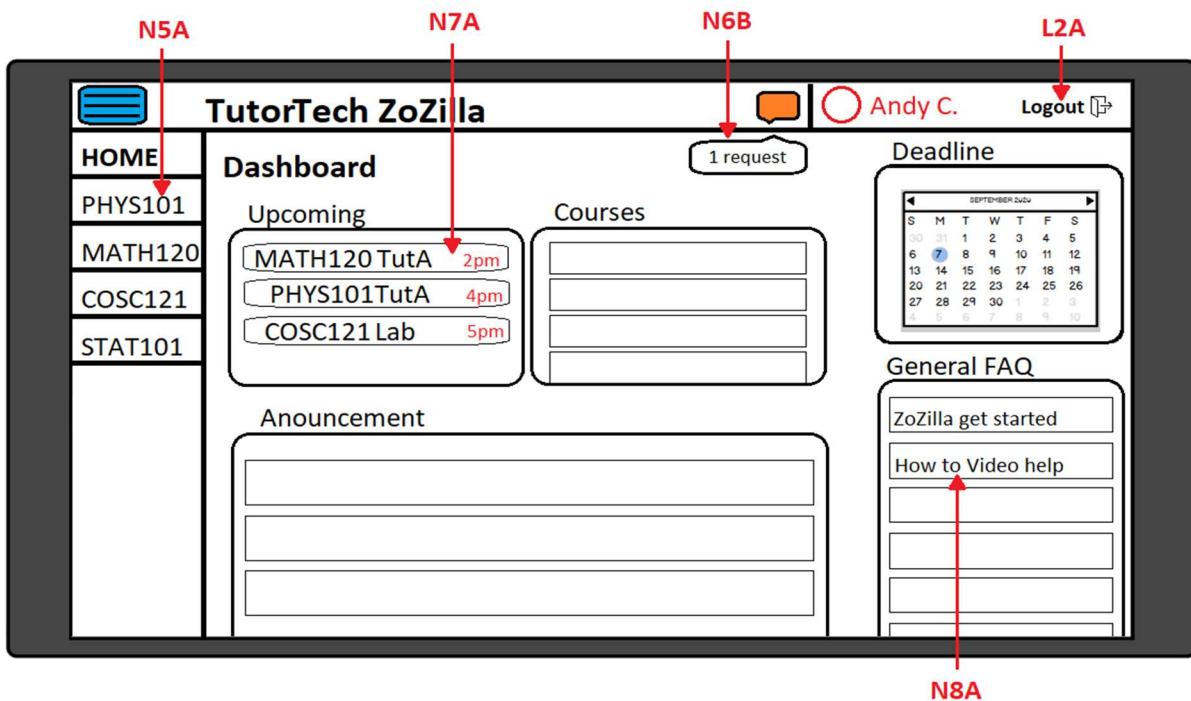
Student Interface

Login Page

- Very simple and easy to use
- Has a save login details button
- Has a forgot password option



Main Page/Dashboard

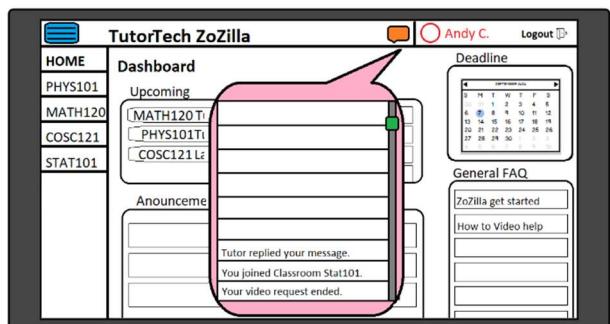


This design includes a strip at the top that is present throughout the page and the course page. Its components were chosen based on tasks which had low frequency but high importance. The logout button, profile name and notifications icon are located in the same place used by many other popular applications therefore many users' prior experiences will help them locate it easily.

This design for the main page is the preferred design because it allows the user to reach the course page easily as well as showing general information from all courses being participated in. Navigating to a course is the main task to be performed on this page so it is located on the Sidebar as well as in the center. General FAQ used to learn about how to use the system

(N8A) is located at the lower right side of the homepage which is visible enough for first time users to see it but is not the focus as N8 is a low priority task.

An expanded window was chosen for the notifications to see many at a time and so they could be easily shown and hidden. The changing of color depending on new notifications was chosen to highlight its importance as a task (N6B).



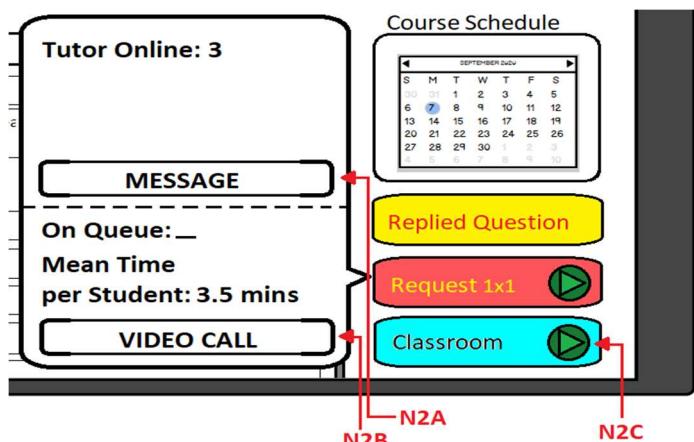
Course Page:

The screenshot shows the STAT101 course page. On the left is a sidebar with course links: HOME, PHYS101, MATH120, COSC121, and STAT101 (highlighted with a red circle). The main content area has a header 'TutorTech ZoZilla' and 'STAT101: Statistics I'. It includes an 'Announcement' section with several items, a 'Course Schedule' calendar for September, and three large colored buttons for messaging ('Replied Question' in yellow), video calling ('Request 1x1' in red), and classroom ('Classroom' in blue). Red arrows point from labels to specific elements: 'N3A' points to the user profile 'Andy C.', 'N4A' points to the 'Course Schedule' button, 'N6C/D' points to the announcement list, and 'N2A/B' points to the video calling and classroom buttons.

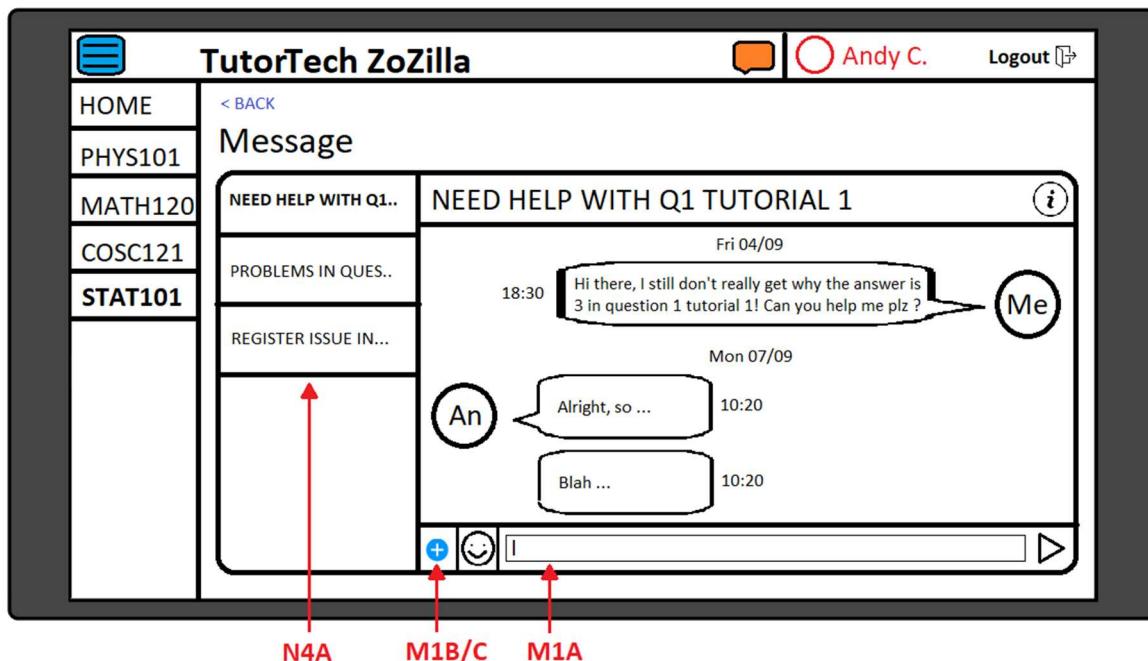
This design was chosen for its simplicity of having relevant course information displayed in the form of announcements and course schedule and having high priority tasks (messaging (N4A), video calling (N2)) be presented with buttons with color to grab users attention.

Request help

Two High priority tasks of sending a private message to a tutor (N2A) and requesting help in the form of a video call with a tutor (N2B) are both displayed in the form of a popup after clicking the "Request 1x1" button. These two tasks are given a clear large box for the user to see relevant information associated with the task.



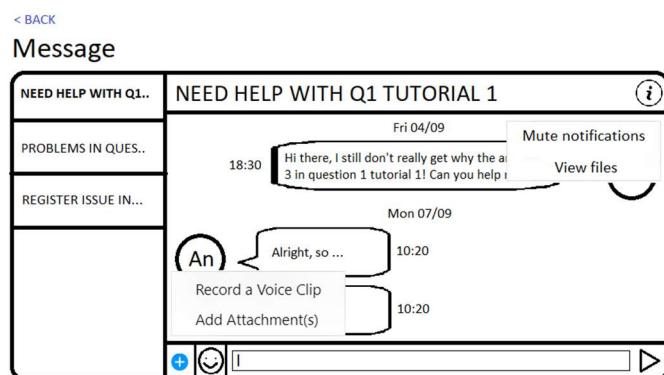
Replied question (chat)



This was the chosen preferred design concept for the messaging interface. It has two main components: the message inbox on the left and the private message on the right to easily navigate between messages (N4A) and reply to messages (M1A).

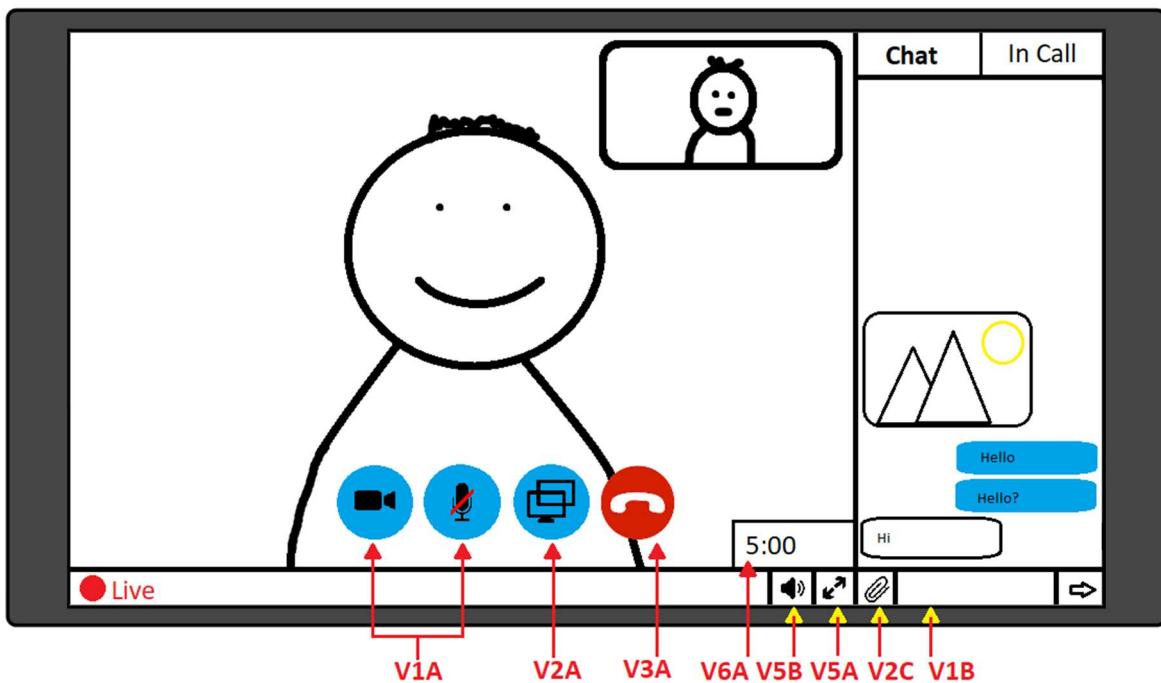
Adding files/video clip:

- Expands so that you have the option to choose which type you want to send.

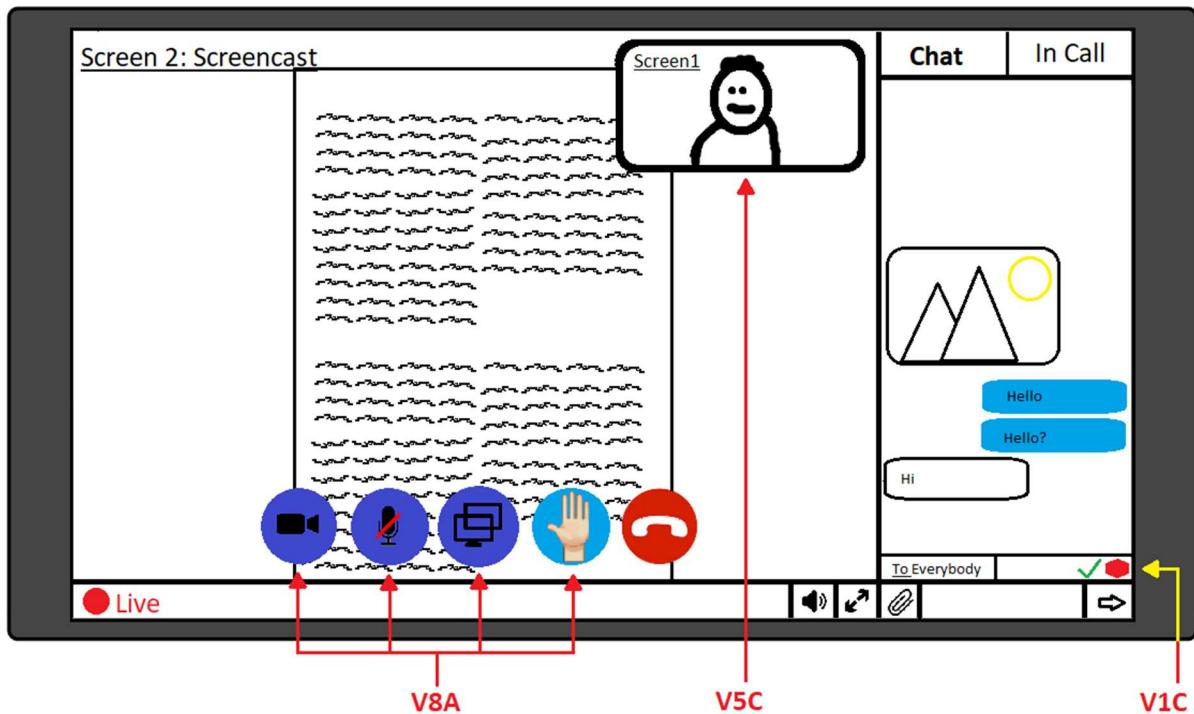


Video call Private

This is the preferred design for the private video call as it is simple and allows a user to identify how to perform tasks. The high priority tasks involving communication are displayed clearly at the bottom centre as coloured icons (V1A, V2A, V3A) and as the chat on the right hand side (V2C and V1B). The non communicating medium priority tasks buttons (V6A, V5B, V5A) are displayed smaller located at the bottom.



Video Live session



This is the preferred design for group sessions with a chat including the voting options (V1C) are displayed clearly on the right side. It is similar to the private session and many other video applications.

Tutor/Instructor Interface

Course Page (Tutor)

The screenshot shows the TutorTech ZoZilla interface for the STAT101 course. The sidebar on the left lists courses: HOME, PHYS101, MATH120, COSC121, and STAT101. The main content area displays a list of announcements:

- New Announcement (Grade Assignment1, Thu, 10/09/2020): Check Gradebook in Learn to view your mark. Marking schedule attached. - Tutor 1
- Tutor wanted!!!! (Wed, 09/09/2020)
- Prepare for LabTest (Wed, 02/09/2020)
- No Tutorial on 6/9 (Mon, 31/08/2020)

To the right is a "Course Schedule" section showing a calendar for September. At the bottom right are three buttons:

- Message box** (yellow background)
- Private Session** (red background)
- Group Session** (blue background)

A red arrow labeled "N1C" points to the "Private Session" button.

This design is identical for the tutor as it is for the student. The only difference being the three buttons at the bottom right have different functionalities. These functionalities will be associated with the tutor's high priority tasks which are creating and managing video sessions.

Video call Private (Tutor, Instructor)

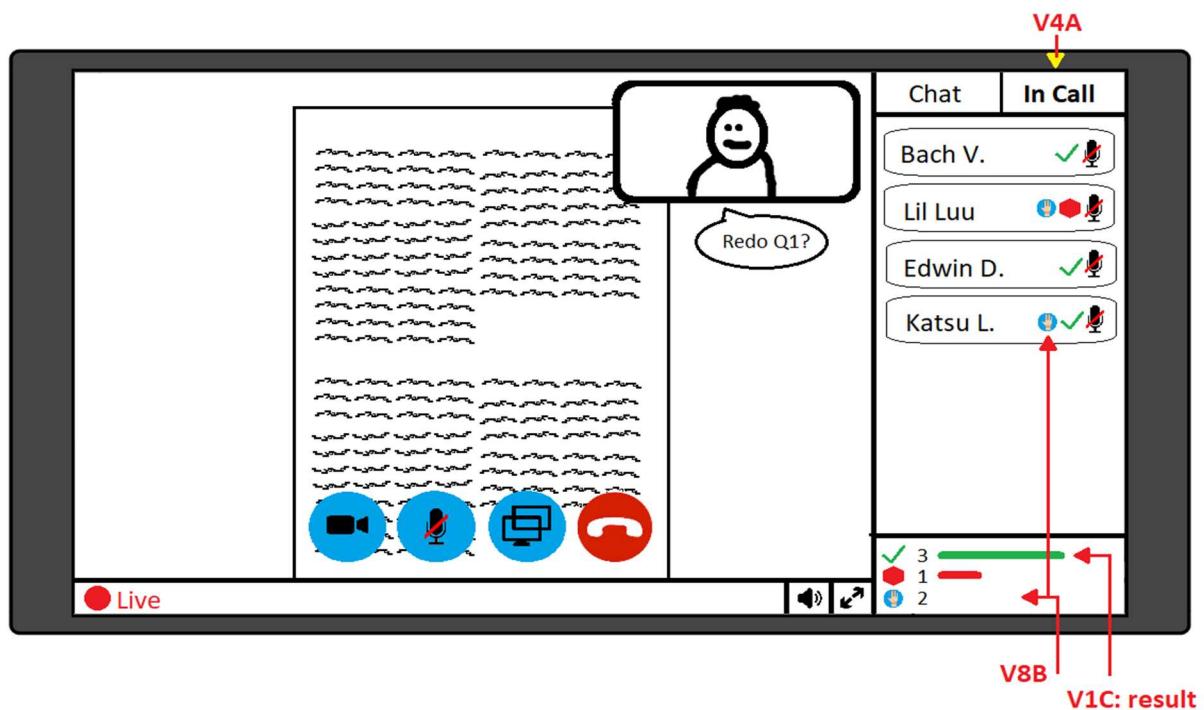
This design is the preferred design for the private session for the video call from the tutor's perspective. It allows the tutor to complete tasks as well as participate with a student.

The screenshot shows a video call interface for Bach Vu. The main area features a video feed of a smiling person, a small video thumbnail for "You", and a "Warning" message asking if the tutor wants to give the student 2 more minutes. Below the video are control buttons for video, audio, and screen share. A red "End call" button is also present. In the bottom right corner, there is a "Live" indicator. To the right is a "Queue" list:

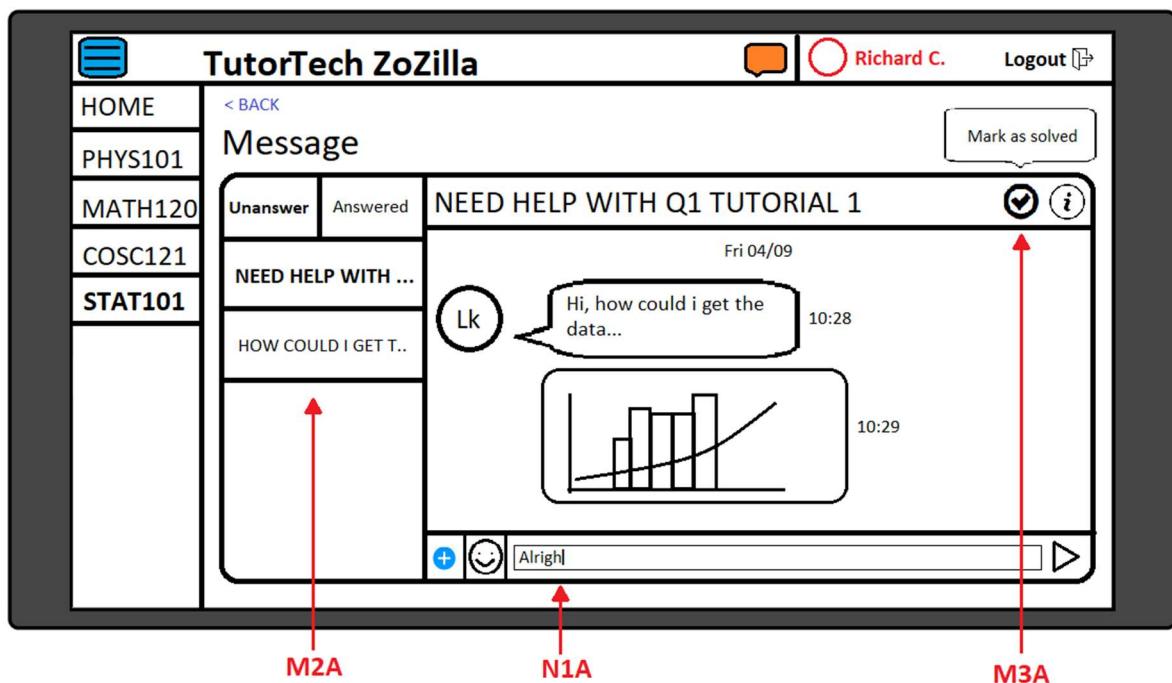
Chat	Queue
Bach V.	4min
Lil Luu	4min
Edwin D.	2min
Katsu L.	1min

Red arrows point to specific elements: one to the "Warning" message labeled "VB6", one to the queue list labeled "Queue status shared between tutors N1B", and one to the "Live" indicator labeled "On call".

Video Live session (Tutor, Instructor)



Message (Tutor, Instructor)



< BACK

Message

The chosen tutor's messaging interface design has the same layout as the students except they have the ability to mark questions as solved and are able to delete messages. The message list is also categorized into answered and unanswered in order to let a tutor help students easier.

Course Page (Instructor):

I1A points to the 'Post Update' section.
I2A points to the 'Student Participation' section.
I3A points to the 'Set Schedule' section.

This design was chosen as the preferred design because it allows the tutor to perform their administrative tasks all in the same page. The instructor is going to be using the system infrequently compared to the other user groups therefore having all their exclusive tasks on the same page. This was done to help them save the amount of time taken to perform their tasks. The order they appear from left to right is the order of the prioritization of the tasks they may perform, left being the highest priority.

The 'Student Participation' section includes fields for 'Event:', 'Tutor:', and 'From 10 am to:'. It also features 'Check Availability' and 'Cancel/Create' buttons. The 'Set Schedule' section shows a detailed weekly schedule for Monday, with specific times and availability markers (+/-).

Conclusion

The designs presented in this report aimed to provide an efficient way for users to carry out their desired tasks in our proposed interface. The alternative designs were created in a way such that these tasks could be carried out effectively and as quickly as possible by users. These designs also provided us a way to visualise and compare different designs in order to create the primary design for TutorTech Ltd by combining what we thought were the best elements from each alternative. In the future we could potentially add more tasks for the students and tutors as this will increase the range of alternative designs and potentially make our chosen interface greater.

Primary Contributions

Ankur Patel

- User and Task Identification
- Preliminary Design Alternatives and Rationale
- Primary Preliminary Design

Bach Viet Vu

- User and Task Identification
- Preliminary Design Alternatives and Rationale
- Primary Preliminary Design

Edwin Dixon

- User and Task Identification
- Preliminary Design Alternatives and Rationale
- Primary Preliminary Design

Katsu Lee

- User and Task Identification
- Preliminary Design Alternatives and Rationale
- Primary Preliminary Design

Linh Khanh Luu

- User and Task Identification
- Preliminary Design Alternatives and Rationale
- Primary Preliminary Design