



# **IMPROVE GROUP WORK EFFICIENCY WITH COURSE COLLABORATOR**

INFO-I 300 | Section 29821 | Ariel Team 4  
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## WHY SHOULD YOU CARE?

College undergrad students have enough to worry about with heightened anxieties in their everyday coursework and involvements. There should be no reason why technology applications such as the use of digital workspaces in everyday group work cause frustrations, headaches, and other inefficiencies. While our research found that workspaces provide the most benefits when they effectively unify distinct applications while providing an all-encompassing solution to group needs, our own primary research revealed that this was far from the truth.



## WHAT'S THE PROBLEM?

Through our first-hand interviews and observations, it became clear to us that while students often have a well-learned process for leveraging technology in their typical long-term course group work, their approaches to utilizing features like resource management and collaborative file editing, scheduling assistance and virtual meetings, group chat communication, and task delegation/management are inherently disconnected and clunky, often disincentivizing students from capturing the full range of benefits offered by these applications. For example, students would rather use a labor-intensive and burdensome process of sending back-and-forth text messages to settle on meeting times rather than utilizing collaborative calendars and scheduling assistants, simply because there are too many existing barriers to their use.



## HOW CAN WE ADDRESS THIS?

We utilized our findings from our primary research to propose various concepts and ideas that addressed a range of frustrations and challenges, including the inaccessibility of scheduling assistants as well as the disconnected nature of file editing software from text-based group chats and video calling platforms. Through a process of low-fidelity sketching and subsequent iterations based on feedback received from potential end-users (as defined by our personas), we fine-tuned our product and settled on creating an all-encompassing digital workspace mobile app that overcomes the many feature limitations of existing products like Google Workspace. We then progressed to creating a medium-fidelity wireframe prototype as well as a fully-interactive high-fidelity prototype that could be critiqued and iterated on through a process of cognitive walkthroughs and user studies. This ultimately provided us with our final product: Course Collaborator.

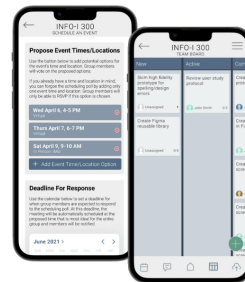
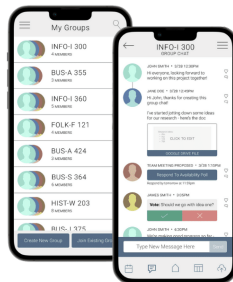


## INTRODUCING COURSE COLLABORATOR

Our app provides students with an all-encompassing and more accessible digital workspace that better unifies features and functionality that are often distributed across a range of disconnected apps. Our goal in creating Course Collaborator was to have students never feel the need to leave our app to attain a desired feature, as this naturally creates inefficiencies that burden group members while taking away from students' valuable time. The Course Collaborator app supports multiple groups, each with their own interactive timeline that assists with group chats, meeting scheduling, file editing, and other interactive poll-based features. Each group also has its own collaborative calendar that assists with meeting creation that is partially automated to find the most ideal meeting times that fit into everyone's busy schedule. There is no longer a need for students to stress about other group members not pulling their weight, as the interactive kanban board can help manage tasks, track completion, and keep members accountable. This is the one and only project management app you'll ever need.



A group of students are assigned as a new team for a term-long course project, but the group's de facto leader is overwhelmed by the amount of digital workspaces, group chats, and other technology platforms that they are having to continually set up, all of which are inherently disconnected and have feature imitations. They worry that they won't be able to keep other group members accountable and that the group will fall behind in their work due to these glaring inefficiencies in collaboration.



The student discovers the Course Collaborator app and is enlightened when they realize that it can fully integrate and unify all of the features their group desires, including traditional communication, scheduling assistance, task delegation, video calling, and file editing. They download the app, create a new group, and efficiently add all members to the group through the QR code and pin-entry functionality.

Course Collaborator is used by the entire group and there is never a need to leave the app to obtain desired features or functionality. Group members are better held accountable through the assignment of tasks on the interactive kanban board, meeting scheduling and creation is automated through scheduling polls and collaborative calendars, file editing is more accessible through integrated cloud storage, and video calling no longer requires users to utilize external platforms and send a cumbersome amount of meeting invitations. The group can collaborate more efficiently with less barriers to their typical work.



GIVE IT  
A TRY!

## Our Project

The Course Collaborator app was designed to help alleviate the stresses and anxieties that students are all too familiar with regarding their everyday group work. While we like to think that the application of technologies in our group work brings about greater productivity, our primary research revealed that this was far from the truth. The existing disconnected and incomplete nature of many digital workspaces simply leaves students frustrated and burdened. Students fail to leverage the full potential of many digital workspaces because there are too many barriers to the use of various features. For example, we found that students would rather engage in a burdensome process of sending back-and-forth text messages to find the most ideal meeting time rather than utilizing collaborative calendars or other poll-based features. This was just one of the many frustrations we identified, and we knew something had to change.

Our team sought to create an app that would unify the most fundamental features and functionality that undergraduate students desire for their routine coursework. What resulted was Course Collaborator, an app that supports multiple groups, each with its own interactive timeline that assists with group chats, meeting scheduling, file editing, and other interactive poll-based features. Each group also has its own collaborative calendar that assists with meeting creation that is partially automated to find the most ideal meeting times that fit into everyone's busy schedule. There is no longer a need for students to stress about other group members not pulling their weight, as the interactive kanban board can help manage tasks, track completion, and keep members accountable.

We created a series of prototypes and engaged in a process of iteration at each stage in the project to perfect our product. Whereas we were solely focused on the high-level organization of the app's intended features while sketching our low-fidelity prototype, the creation of high-fidelity prototypes on Figma allowed us to further delve into the app's aesthetics, navigation, and interactions. We employed a series of cognitive walkthroughs that revolved around the four major tasks featured within our app to identify potential pain points that end users would experience. We further analyzed our prototype and collected feedback through a series of user studies. Changes were made to the placement of various buttons, the descriptiveness of instructions, as well as the inclusion of previously omitted features. Furthermore, we polished the fluidity our prototype by improving the animations between screens and constructing a more consistent navigation.