# NoteTaker

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	Beta Version	Final Version
.aia Files (Source Code)	CSP2_Liang_Moorkoth_NoteTaker_Beta.aia	CSP2_Liang_Moorkoth_V2.aia
.apk Files (Packaged App)	CSP2_Liang_Moorkoth_NoteTaker_Beta.apk	CSP2_Liang_Moorkoth_V2.apk

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#### KEY:

Red: Trisha Blue: Alan Final app

## **Brainstorming:**

- 1) Trivia (President's Quiz)
- 2) Scheduling app (NoteTaker)
- 3) Game (Molemash)

## **Top Two Ideas:**

### 1) Scheduling App (NoteTaker):

To develop this app further, we want to include multiple organizational featuresexcluding the basic notes portion of the app- in order to make the app more complex. Examples of these could be alarm clocks/timers, and periodic reminders that can be set by the user.

#### 2) Trivia:

Instead of just having a quiz app, we want to integrate learning into the quiz. We could have fun-facts pop up throughout the app in order to give the user more information. In addition to this, there could be several quizzes that vary in difficulty.

Final Choice: We chose to further develop our Scheduling App idea as our final project for numerous reasons that relied on the functionality of the app in a user's daily life. We wanted to create something that was practical in use and helpful to students, employees, or for people who needed a convenient way to organize their daily tasks. We believe that our Scheduling App will help fulfill these purposes because of the convenience of the app and its usefullness in recording information, planning events, and organizing tasks.

### Tiers:

Tier 1: Timestamped notes, TinyDB

Tier 2: Alarm clock, different sounds

Tier 3: Calendar, reminders, etc.

## Pair Feedback:

Our feedback group suggested that when the events are saved, it would be beneficial to save them to the Calendar app, or on a calendar integrated into our app (add a screen). In addition, we should also try to organize the space of the app so that it fills up more of the screen. We should also make the screen a little less bland, perhaps filling up the screen or adding colors would help.

# **Beta Gallery Walk:**

<i>Instructions:</i> To enter a note, type into the textbox and click "Save". You can set reminders by setting a day and time.		
Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.	
I liked concept and it completes function  I like the date picker and it was pretty easy to pick up.	Really nice concept, but I would prefer if the app could put the date, time, and event all together at the bottom, instead of separately.  Maybe try allowing the user to include multiple events, but great job!	
	Lots of empty space, makes app look a little boring x2	
	Wasn't really sure what was going on in the beginning. Maybe you guys should add a text on the top that says what you're supposed to do. X2	
	The time should have an option for being either 24-hour-time or standard time	
	The purpose is unclear and the page it is displayed on could have been more interesting and engaging	
	Maybe create a list of all of the events so the user can scroll through them.	
	Do the reminders pop back up?	
	What is the purpose of the calendar? Will it actually remind you?	
	Didn't really understand what it was supposed to do until I read instructions.	

# Final Gallery Walk:

*Instructions:* In order to switch between screens, use the top 2 buttons. While on the notetaker screen, you can record notes by typing a note into the textbox and clicking "submit." While on the timer screen, set the time you want to be reminded with the timepicker button, and click the button that says "off." Once clicked, the button should say "on." While on the reminder/calendar screen, use the datepicker button to set the date you want to be reminded, and then use the timepicker button to set the specific time that you want to be reminded on that day. Once set, write a note or a reminder in the textbox, and click save.

Pro: Features Liked Con: Aspects that were confusing, buggy, or etc. When entering an empty message, there should Very useful. I like how it combines multiple common utilities into one app. be an error message instead of doing nothing. A good place for multiple tools on one The event does not function properly, it simply only sets the event. The timer does not function application as I thought it would, it does not ring or It's a nice and easy way to save your current anything. thoughts. There is no way to know if an event or timer has been set or not It's nice to be able to record your plans for the week Poor aesthetic design I like that there are a lot of features that people can use. I find that the notes tool is quite useful Is the timer on? but it deletes once you back to the calendar Your notes disappear when you switch between calendar and back to notes Notes don't save when you switch the application to calendar and/or timer Clear Notes don't work When clicking the clear button, it does not clear it and calendar and timer does not save Clear button does not work and the event doesn't save When you typed in the note then it resets the timer to off Timer doesn't work at all

### **Conclusions:**

### Trisha:

As a result of this project, we were able to code and design all three tiers of our planned app. For the notes, we modified the tutorial provided by the App Inventor forum, adding the option to clear notes and include timestamps. As for the timer and calendar, we used outside resources such as video tutorials and online forums to add to our app. In hindsight, it would have been beneficial to us to install the app more often- ideally after every major modification- to see that they actually function properly and to accommodate for any mishaps that occur. There were many basic functionality issues that could have been fixed if we'd done this- for example, the notes deleting themselves every time the user switched to a different screen- so it's something to keep in mind for future app and program developments.

#### Alan:

By finishing this project, we learned how to code/design three different types of apps. For the coding of the notes, we followed the tutorial and added a few other features. As for the other two, we used outside sources as well as our own knowledge. It would have been more beneficial for us to install the app to see the difference between the companion app and the actual app. By doing so, we could've fixed some basic issues.

## **Daily Log Entries:**

Daily Log: Day 1: 9/18

Trisha: We brainstormed ideas related to game or quiz apps. We decided we didn't want to create a story app because it would be easier to integrate user interaction with a game or quiz. We decided on the Note Taker app because we wanted our app to be applicable to everyday tasks and useful to the people who use it.

Alan: We came up with ideas, chose our top two, and got Mr. Brown's approval for the Note Taking app, since trivia was already taken, and note taking was our second option.

Daily Log: Day 2: 9/19

Trisha: Using the tutorial, we started working on the first tier of the Note Taker app.

Alan: Came up with our tiers, and began coding. We added TinyDB, as well as a way to show the stored notes.

Daily Log: Day 3: 9/20

Trisha: We had some trouble with creating a procedure, but it turned out that the wrong block was being used and that a variable- "list"- had to be initialized before we continued on with the code.

Alan: Continued coding, began looking for other tutorials for the other tiers

Daily Log: Day 4: 9/21

Trisha: After completing and commenting on the first-tier of our app, we started adding to the second tier, in which we would add a timer/alarm and calendar. We needed sound for the timer, but we haven't yet uploaded a clip to the app.

Alan: Still continued coding, finished notetaker, began working on alarm and calendar.

Daily Log: Day 5: 9/24

Trisha: After finishing the alarm, we searched for ways to create reminders for each event. Then, we attempted to install and package the app, but we kept getting errors. We continued to work on the layout of the app.

Alan: Finished alarm and created a basic reminder to integrate into the calendar. We tried packaging the app, but it took too long. Formatting on the note taker, added scrolling so the user could see all of the past notes, made the text box larger and have multiple lines, so it could expand. Also made the font size of the notes a little smaller in order to fit with the formatting of the app.

Daily Log: Day 6: 9/25

Trisha: The calendar aspect of the app has been completed- when the user wants to set a date, they click on a button that reveals a calendar- and the app is still functioning properly. We started putting the three different parts of the app together- the calendar, alarm, and the plain note-taking interface from the first tier of our app.

Alan: Continued coding, planning on putting the three apps together

Daily Log: Day 7: 9/26

Trisha: We tried installing our app onto the tablet. At first, we installed the wrong version (which led to re-labeling and reorganizing all of the versions/projects on the "My Projects" page). Then, we were able to install the correct version, but forgot to rename the app to "CSP2\_Beta". We installed the app again, after I renamed *the project* "CSP2\_Beta", but the app still showed up as "CALENDAR" (what we named the project previously). We then noticed a box under the Properties part of the editor that was labeled "AppName". After changing the name once again using the AppName property, we were able to successfully install the app with the correct name. Fortunately, it worked as planned.

Alan: Prepared for Beta walk tomorrow, tried installing the app to see how it'd work. Worked fine.

Daily Log: Day 8: 9/27

Trisha: We didn't exhibit our finalized app because the code was still being combined, so we put up our calendar version instead.

Alan: Beta walk, received and gave feedback to to others. We were told that our app looked bland, so we're planning on making it look a little more interesting by adding colors or making existing assets larger.

Daily Log: Day 9: 9/28

Trisha: Filled out and updated the notebook. Also worked on organization of the notebook.

Alan: Started organizing our notebook and formatting it to look better. Finally received pair feedback today. Told us what other classmates told us: bland, could make the app look more interesting. Also, they said that we should have multiple reminders, as well as having them saved into the calendar.

Daily Log: Day 10: 10/1

Trisha: Finished combining all three tiers of the app. We aim to have it finalized by tomorrow so we can test and fix any bugs in the code. Added a "Clear All Notes" button. Need to work on alarm clock (download sound clip, make it look good) and start screen (instructions).

Alan: Combining all three of the apps together, planning on making a few visual changes before finalizing(colors, background, etc.).

Daily Log: Day 11: 10/2

Trisha: Have debugged and finished the navigation portion of the app "Go To ...". Now working on visuals and start screen (for instructions). Also might have to look at functionality of the calendar (reference Beta Gallery Walk Feedback). Have to comment the code.

Alan: Made a few visual changes, debugged the app, planning on adding/fixing to the calendar. Also planning on commenting.

Daily Log: Day 12: 10/4

Trisha: Started working on the start screen.

Alan: Fixed problems with changing the screens. Added a start screen, as well as debugging.

Daily Log: Day 13: 10/5

Trisha: Finished start screen, worked on alarm, but sound does not function properly.

Alan: Finished and polished the start screen. Continued debugging.

Daily Log: Day 14: 10/9

Trisha: Gallery walk. Received more pros than last time, but app wouldn't work.

Alan: Started Gallery Walk today. Going to receive feedback for our final, finished app.

## **About the Algorithms:**

Calendar: The algorithm is used to notify the user at the user-scheduled event time.

- 1. Date and time are set
- 2. Once saved, timer is enabled.
- 3. Find duration from "now" to the time and date set by user.
- 4. Clock interval set to the duration from step 3.
- 5. Clock timer event is triggered when the clock reaches the event time.
- 6. Pop-up a notifier with the event content.
- 7. Disable timer, since the event is a one-time event.

Notes: Notes with timestamps initialization from a tinyDB.

- 1. When the screen is initialized, the tinyDB gets the existing notes. If data is absent, then it'll create an empty list.
- 2. Convert list to a string.
- 3. Shows existing notes on screen.

Save user-inputted notes

- 1. Read notes from input text field
- 2. Add notes and current time stamp to the note list.
- 3. Save note list to tinyDB
- 4. Display latest note list on screen

Clean up all notes

- 1. Set note list on screen to empty
- 2. Set note list in tinyDB to empty.