

**Mhealyssah Bustria**

**3. Specifically describe a software application that you would like a group of students in our class to build as their class project. If your application is selected by the instructor, you will receive 1 extra credit (on top of your overall grade) at the end of the semester. Of course, you can still choose your application as your class project. (30 Points)**

The software application that I would like a group of students in our class to build is a daily task-organization application. This application would be a personalized daily calendar that could be shared and updated among a group of people.

The application would display the layout of one day on the device's screen, with the day split into 48 blocks (each block represents a 30-minute time frame). The basic layout is that there will be four rows with twelve blocks per row, and an additional row on top to display the date, extra comments, and extra To-do items (see Example A below).

A user can add a colored bar to a specific block when that user completes a task, and the application will be updated among the shared users so that everyone can know when a task has been completed. When a bar is added to a block, an exact time (hour and minute) will be displayed inside of the bar. When adding a bar, the user can choose to have the current time displayed on the bar or to manually enter a time. Manual entry of the time can be useful for when a user for any reason decides to add the bar at a later time than the task was completed. Users can also add comments to a bar, or even add a comment for the day in general. When a block is edited, a colored bar will appear on that block, and a user can tap it to view the details of that bar. For additional personalization and organization, a group of users can set different categories of tasks and/or comments to show up as differently-colored bars.

Furthermore, users can choose receive various notifications, such as: when a user completes a task, when a certain category of a bar is added or edited, when any user makes any edit to a block, and when a set task has not been completed within a set amount of time (for example, a reminder that it has been over 12 hours since the dog ate breakfast).

To be more effective, the application would allow the user to add a widget to their device's home screen to be able to view the day's layout and updates without manually entering the application.

Examples

In the examples below, a group of users are utilizing the app to keep track of taking care of their dog. This group of users has chosen the following settings regarding the bar colors that correspond to certain categories:

Bar Color	Category
green	Task: Feed the dog
yellow	Task: Take the dog out
blue	extra task
red	extra comment

Example A: The main layout of the day, with some bars added by the users throughout the day.

Wed	06	Feb	2019	To-d o	7:40	[add]					
12:00 am	1:00	2:00	3:00	4:00	5:00	6:00	7:00 7:15 7:15	8:00	9:00	10:00 10:27	11:00 am
12:30 am	1:30	2:30	3:30	4:30	5:30	6:30	7:30	8:30	9:30	10:30	11:30 am
12:00 pm 12:15	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00 pm
12:30 pm	1:30	2:30	3:30	4:30 4:45	5:30	6:30 6:37	7:30	8:30	9:30 9:30	10:30	11:30 pm

Example B: This is what a user would see after tapping on the green bar that is in the 7:00am - 7:29am block. It can be seen that even if a person makes a comment outside of the 7:00am - 7:29am time frame, that comment will still be added into the same block that the bar of interest is in. A user can choose to reply to a previous comment or to add a standalone comment.

7:15am - Task completed by: Mhea  
 Task completed: **Feed the dog**  
 Comments:  
 - Mhea (7:15am) "He didn't finish his food"  
 [Reply]  
 - Mom (7:40am) "Feed him an extra snack later"  
 [Reply]  
     - Mom added an extra task for today:  
         - "Give the dog an extra snack"  
             [Reply]  
 [Add comment]

Mom was able to add an extra task while viewing the details of this bar. After Mom added an extra task for the day, a blue bar was added to the To-do section of the top row. Any user can tap on the blue bar to view its details.

Example C: This is what a user would see if after tapping on the blue bar that is in the To-do section of the top row. If a user taps on the [Mark as completed] button, the blue bar will be moved out of the To-do section and will be moved into a time block based on what time the task was completed.

7:40am - Extra task added by: Mom  
 To-do: Give the dog an extra snack  
 Deadline: unspecified  
 [Add comment] [Mark as completed]

Example D: This is what a user would see after tapping on the blue bar that is in the 10:00am - 10:29am block.

10:27am - Extra comment added by: Mhea  
 - Mhea (10:27am) "The dog knocked over the trash can"  
 [Reply]  
     - Dad (12:00pm) "Oh no!"  
         [Reply]  
 [Add comment]

Example E: This is an idea for what the user might see after tapping the [add] button on main layout. The "Mark task as complete" section will list the pre-set daily tasks set by the users and will also list any extra tasks that are currently in the To-do section.

Time

☐ Use current time

☐ Manually enter time \_\_:\_\_ ☐am ☐pm

Mark a task as complete

☐ Feed the dog

☐ Take the dog out

☐ Give the dog an extra snack

☐ Add an extra task

Title: \_\_\_\_\_

Deadline: \_\_:\_\_ ☐am ☐pm ☐no deadline

☐ Add comment

\_\_\_\_\_

[Click here to finish]