To-Do Planner

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Course Name: SFWR ENG I ANALYSIS, DESIGN, TESTING
Group Number: 7
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To-Do Planner App:

Every individual has some tasks to execute as we know how the daily routine tasks in professionals' life matter and the deadlines must be met accordingly as the individual progresses towards successive tasks of the goals to be achieved. The problem that we are trying to solve with the "To-Do planner app" is that of boosting productivity.

The To-Do planner app is a basic and ordered approach to schedule tasks and organize tasks which will help users to complete the tasks. Task has a section that describes the category of tasks. Users can create tasks by going into the sections or individually. Each new task has its own name and a small description. The user can set a due time to a task and the app will notify the user based on the deadlines and priorities assigned to the task. The due date and time can be added using date and time picker. Sometimes a user completes a task before due time in that case the user will be provided with the check box to mark the task as completed. A user can set priority to each task which is shown on the dashboard as Critical, high, medium, and low tasks. Alerts are on a recurring basis until the task is dealt with. they are supposed to keep up with so that tasks would be finished within deadlines.

Functions of the software:

22. **Create tasks:** Users shall create a task with a title and a small
23. description of the task.
24. **Create sections:** The user shall create a section where the section
25. acts as a collection of related tasks.
26. **Schedule a task:** The user shall add the date and time by which
27. the particular task has to be completed.
28. **Prioritize tasks:** Users shall categorize the priority of tasks as
29. Critical, high, medium, and low.
30. **Simple user interface with ease of use:** The user shall be able to
31. navigate between screens with minimum technicality.
32. **Notification, Alert, and reminders to keep track of schedule:**
33. Users will be alerted with notifications before tasks are due.
34. **Dashboard:** Users will be able to see the list view of the top10 tasks
35. according to the priorities. Additionally, the tasks which are due
36. on the present-day or within a week are displayed in grid view.
37. **Filtering Tasks:** The user will be able to filter tasks according to
38. the priorities.
39. **Delete Tasks:** Users can delete as Task.

Resources to be utilized:

1. Database: to store the data of the user.
2. Wireless internet connection: wireless internet connection is required initially to download the application. The application does not require any internet connection.

Team Members:

1. **Parshva Shah** - I have learned the basics about Android App Development and Java programming language during my under-graduation. I also have some prior experience in mobile engineering with iOS App Development with programming in Swift Language. I have also worked with IDEs like Android Studio and Xcode to develop mobile apps.
2. **Parth Patel** – I have created basic android applications during my undergraduates using android studio and, I have some intermediate-level knowledge of the java programming language.
3. **Paridnya Mane** - I have participated in a few follow-along coding workshops to create Android apps using Android Studio back during my undergraduate studies. I have worked considerably with Java projects and have a fair syntactic understanding of the language.
4. **Yogesh Kalapala** - I have some basic knowledge about how Android Studio works, but I have never applied my skills to a finished project. I have built some clone apps using ReactNative in my free time. In my previous projects, I used Java and JavaScript.
5. **Abdulbari Syed** - I have developed select features for an iOS mobile application such as blood donor user login, blood bank coverage in the area, and blood donation registration using XCode in Swift programming language. I also developed select features of web application to access crop resource information, price forecast, and data analysis for productivity using Visual Studio Code and Python. Still learning basics and advances in Android studio and its documentation.

Requirements:

Req Id	Req Statement	Line
R1	The app shall have section which describe category of task	line 9
R2	The app shall allow user to create a task	line 10
R2.1.1	The app shall allow user to create an individual task	line 10
R2.1.2	The app shall allow user to create a task in sections	line 10
R2.2	The app shall have name assigned to the task	line 11
R2.3	The app shall have small description of the task	line 11
R3	The app shall allow user to set due time and date	line 12
R4	The app shall notify the user	line 13
R4.1	The app shall notify user based on deadlines	line 13
R4.1.1	The app shall notify the user 2 hours from the deadline by default	derived
R4.2	The app shall notify user based on priorities	line 13
R4.2.1	The app shall notify the user before certain amount of time from deadline depending on the priority set by the user	derived
R5	The app shall allow user to change the status of the task	line 16
R5.1	The app shall provide check box to change the status of task	line 16
R6	The app shall allow user to set the priority to a task	line 17
R6.1	The app shall allow user to set priority as critical or medium or low	line 18
R7	The app shall display the summary of tasks in list view to user	line 34
R8	The app shall contain dashboard that displays the tasks which are due in current day	line 34-36
R8.1	The app shall contain dashboard that displays the tasks which are due in current week	derived
R8.2	The app shall display the summary of tasks according to priorities	line 34,35
R9	The app shall allow user to delete a task	line 39
	Constraints Functionality	
Constraint Id	**Constraint Statement**	**Line**
1	The list view of app shall be limited to 10 rows of list.	line 34
2	The app shall allow users to assign tasks upto 3 months of due date	derived from R3
3	The app shall not keep record of completed tasks.	derived

High-Level Use Case:

Use Case1: Create task
   a. TUCBW the user clicking on “+” symbol
   b. TUCEW the user sees a new task successfully added to the list of tasks

Use Case2: Delete Task
   a. TUCBW the user clicks a delete button in task window
   b. TUCEW the user sees task deleted from the list of tasks

Use Case3: Modify Task
   a. TUCBW the users click on the edit button of task window
   b. TUCEW the user changes the required parameter of the task

Use Case4: Assign Name+
   a. TUCBW the user select text box beside Task Name label
   b. TUCEW the user successfully assigns a name to task

Use Case5: Assign task Description
   a. TUCBW the user select text box beside Task Description label
   b. TUCEW the user successfully assigns a description to task

Use Case6: Set due to date /deadline
   a. TUCBW the user select date picker beside Due Date label
   b. TUCEW the user successfully assigns a deadline to task

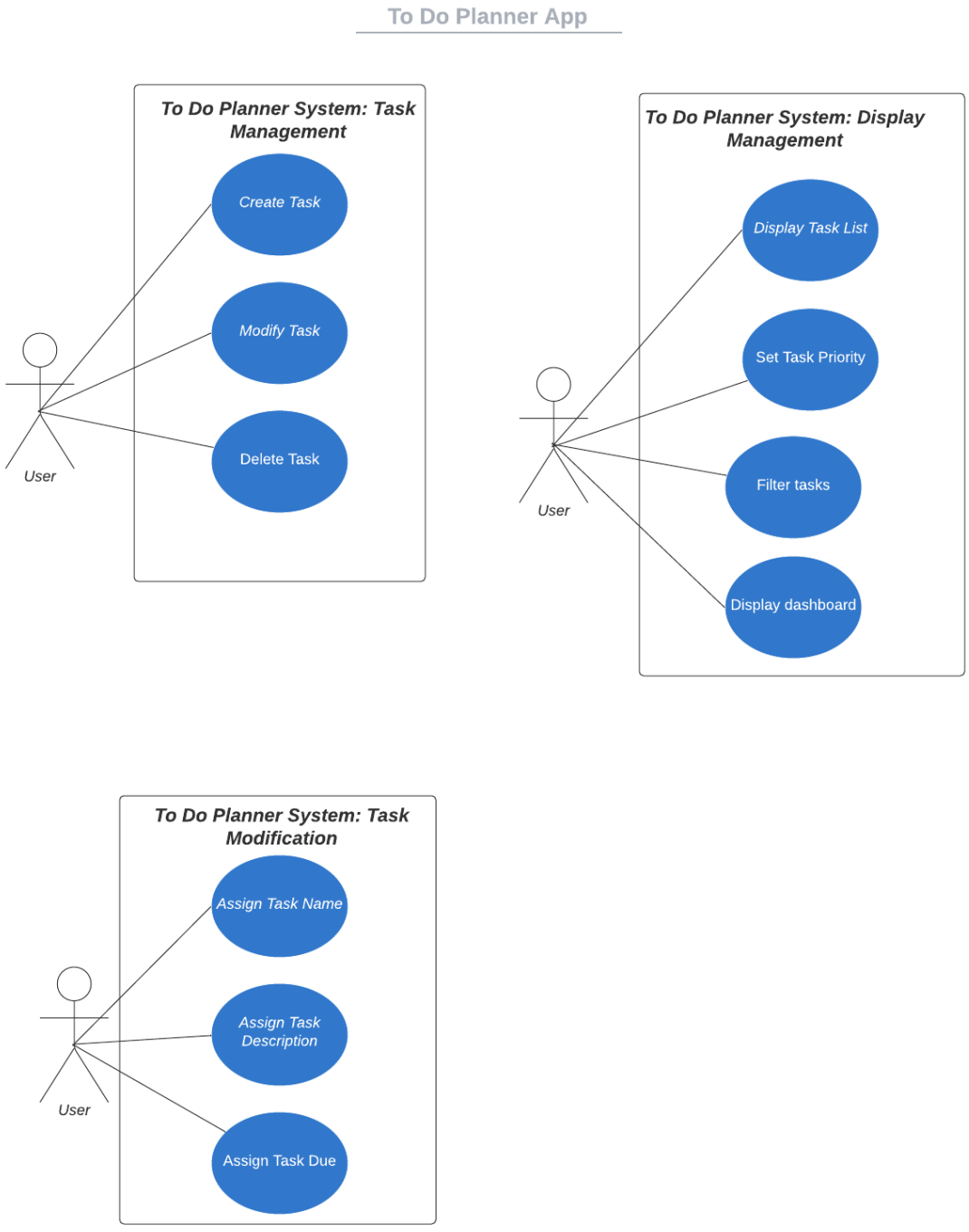
Use Case7: Set Priority Task
   a. TUCBW the user clicks priority from the drop-down menu
   b. TUCEW the priority is set to the particular task

Use Case8: Display Task List
   a. TUCBW the user clicks on the task icon at the bottom of the application.
   b. TUCEW the application displaying a list view of tasks.

Use Case9: Display Dashboard
   a. TUCBW the user clicks on the dashboard icon
   b. TUCEW the application displays summary of tasks and tasks by due date are displayed in grid view.

Use Case10: Filter Tasks
   a. TUCBW the user clicks on the filter menu
   b. TUCEW application displaying the list view of tasks based on a selected category of priorities.

Use Case Diagram:



Requirements Use Case Traceability Matrix

	Priority weight	UC-1	UC-2	UC-3	UC-4	UC-5	UC-6	UC-7	UC-8	UC-9	UC-10
R1	1	X									
R2	1	X									
R2.1.1	2	X									
R2.1.2	2	X									
R2.2	2				X						
R2.3	2					X					
R3	2						X				
R4	1										
R4.1	2										
R4.1.1	2										
R4.2	2										
R4.2.1	2										
R5	4			X							
R5.1	4			X							
R6	3							X			
R6.1	3							X			
R7	1								X		
R8	2								X		
R8.1	2									X	
R8.2	2										X
R9	4		X								
	SCORE	6	4	8	2	2	2	6	3	2	2

Priority weights are 1 to 5. 1 being highest and 5 being the lowest

Increment Matrix

Use Case	Priority	Efforts(in terms of person)	Depends on	Assigned to	Iteration 1 (3/11/2022)	Iteration 2 (04/08/2022)	Iteration 3 (05/02/2022)
UC-1	6	1	None	PS		1	
UC-2	4	1	UC-1	PS		1	
UC-3	8	3	UC-1	AS		2	1
UC-4	2	2	UC-1	PP		2	
UC-5	2	1	UC-1	PM		1	
UC-6	2	4	UC-1	PP		2	2
UC-7	6	4	UC-1	PM		1	3
UC-8	3	2	UC- 1-8	YK		1	1
UC-9	2	4	UC-1,6,8	PM			4
UC-10	2	4	UC-1,8	AS		1	3
Total Efforts		26				12	14

PS = Parshva Shah, YK = Yogesh Kalapala, PP = Parth Patel, AS = Abdulbari Syed, PM = Paridnya Mane

1 person week= 5 hours

Domain Model