

Assignment

Sketch

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Assignment Instructions



Suppose you're working as a PM at DoToday, a startup working on a next-gen to-do list and task management app. You want to launch the smartphone app, for Android and iOS. You understand that the app functionality would be the same for both of these, and hence you only want to focus on sketching it out. As the sole product manager working on this app, you have a few ideas regarding the design and functionality that you'd want to incorporate.

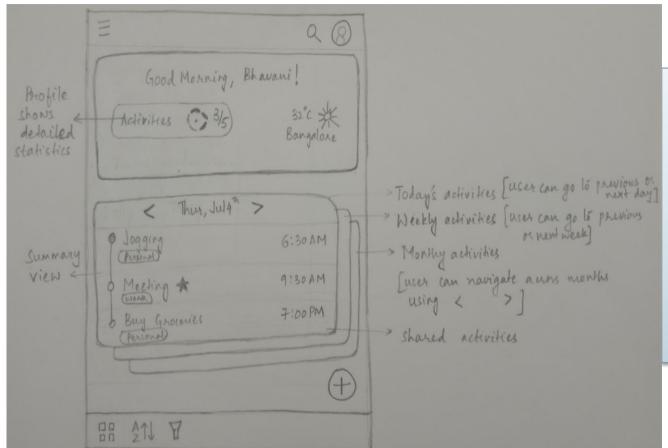
The objectives of this assignment are:

- 1. Functional requirements: Identify the range of functional requirements, taking in consideration all use cases and identify the best possible solution to perform the task
- 2. Sketch description: Create the required sketches and place the screenshot of each screen on relevant slides with details of the screen. Prepare a slide showing the flow of your sketch along with constraints
- 3. User testing for each screen with a suitable user, along with learning from the same

Note: Only think of the functionalities you would like to have in both of these apps and sketch the paper prototypes based on that. Also, don't worry about the nuts and bolts like login or registration; concentrate on the cool stuff.

Dashboard (Home Screen)





Dashboard -

- Shows stacked cards of Day, week and month-wise activities in different cards, placed one behind another, stacked as layers.
- Right swipe or click on specific card to view activity list.
- Over all activity progress is shown
- User can switch to category list view, choose to sort or filter
- A new activity can be added by clicking on +



Use cases

Functional requirements

Choice of best solution:

Use case scenarios:

Case 1

- Summary view of activity list is shown (Today's and This week's by default as sliding tab layout)
- · User scrolls to see full list
- User clicks on one activity and navigates to detailed activity view
- Opens calendar default view shows this month and dates are highlighted where there are activities present.

Case 2

- Summary view shown as stacked cards (allowing user to navigate day, week or month-wise.
- Swipe up a card to see full list of activities
- User clicks on one activity and popup showing that activity is shown
- No calendar if stacked cards are shown

Errors & Constraints:

- No activity on particular day/week/month empty data case handling load some view to tell user that no activity is there on that day.
- Network or server issues to fetch activity list data

Allow a user to view summary of activities displayed on the Dashboard (Home screen)

Allow user to look at the summary of activities (day-wise, week-wise and month-wise)

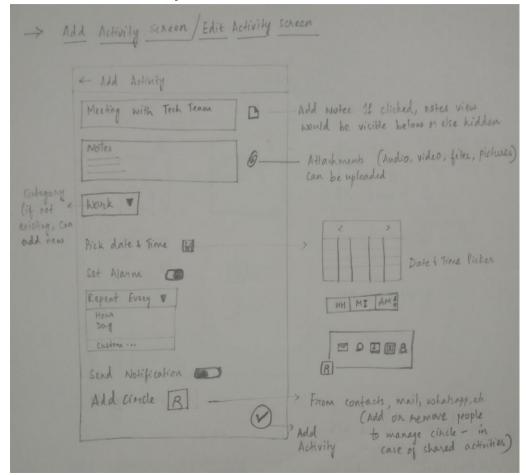
Event Flow:

- Visit Home page
- Stacked cards showing activity summary are displayed.

To have a good UX,
Summary can be shown as cards
stacked behind one another —
Sliding up or swiping (as chosen in
gesture action settings) would give
detailed view of activity list related to
that duration(day/week/month).

Clicking on specific stacked card would bring that view to front – 1st card: Day wise view 2nd card: Week wise view 3rd card: Month-wise view

Add an Activity





Add activity view - allows user to add some details like Title, add notes, attach files, choose category, pick date and time for activity completion

- If category is not already existing, the user can choose to 'Add New' which would appear as the last option of the searchable drop-down list.
- User can set alarm and choose to repeat it every chosen interval
- Notifications on update of activity status can be enabled/disabled
- Add circle (choose contacts to add more people for shared activities)



Use cases	Functional requiremen
 Scenarios: Click on + in Activity listing view, enter details. From the categories view choose to Add an activity in that category. 	Allow user to Add a To-Do Activity
 Add a new activity successful message is shown 	User can add an activity by ente
 i. After adding an activity successfully, the entire activity list will be shown ii. After adding an activity successfully, success message is shown and user is redirected to Dashboard – to see entire 	Event Flow: • Visit Home screen • See activity list by clicking on
Errors & Constraints: - Network or server issues to save activity data	 of the day, week or month-wis cards. Activity list is displayed. Click on '+' to go to add a new activity
 Activity with same title already exists Missed filling all fields to continue adding an activity Invalid characters entered (Ex: Title in only number format entered) 	Enter valid detailsClick on tick marked button to
- Activity completion date chosen is less than today's date.	

Error adding contacts

unctional requirements

er can add an activity by entering ails.

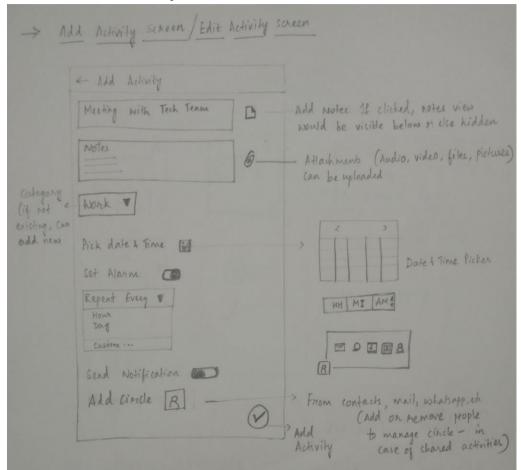
nt Flow:

- isit Home screen
- See activity list by clicking on any f the day, week or month-wise ards.
- activity list is displayed.
- Click on '+' to go to add a new ctivity
- inter valid details
- lick on tick marked button to add

Choice of best solution:

After adding an activity successfully, success message is shown and user is redirected to Dashboard - to see entire summary

Edit an Activity





Edit activity view - allows user to reenter details like Title, add notes, attach files, choose category, pick date and time for activity completion

- If category is not already existing, the user can choose to 'Add New' which would appear as the last option of the searchable drop-down list.
- User can set alarm and choose to repeat it every chosen interval
- Notifications on update of activity status can be enabled/disabled
- Add circle (choose contacts to add more people for shared activities)



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- Edit an existing activity successful success message is shown
- After editing an activity successfully, the details of that activity would be shown
- After editing an activity successfully, success message is shown and user is redirected to Dashboard – to see entire summary

Errors & Constraints:

- Network or server issues to save edited activity data
- Activity with same title already exists
- Missed filling all fields to continue editing an activity
- Invalid characters entered (Ex: Title in only number format entered)
- Activity completion date chosen is less than today's date.
- Error editing contacts (removing and adding)

Allow user to Edit a To-Do Activity

User can edit an activity by entering details.

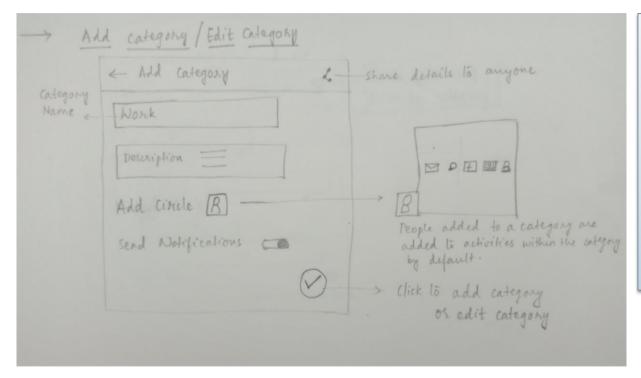
Event Flow:

- Visit Home screen
- See list of activities
- Click on one activity from activity list
- View activity screen is displayed
- Now choose edit option
- Edit details
- Click tick marked button to save

After editing an activity successfully, the details of that activity would be shown

Add/Edit a Category





Add/Edit Category view – User can add a new category by giving Title, description, choosing category circle.

- Notifications on update of activity status can be enabled/disabled
- Add circle (choose contacts to add more people for shared categories).
- All the activities within that category would have all these people added to the circles by default. User can choose to remove any contact by clicking on Manage Circles option for an activity.



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- Add a category from within Add Activity screen
- Add a category by choosing + under Category listings screen.
- Add/Edit a category successful success message is shown
- After adding/editing category successfully, the details of that category would be shown
- After adding/editing a category successfully, success
 message is shown and user is redirected to Categories list
 to see all categories

Errors & Constraints:

- Network or server issues to save category data
- Category with same title already exists
- Missed filling all fields to continue
- Invalid characters entered (Ex: Title in only number format entered)
- Error adding contacts

Allow user to Add or Edit a category

User can add/edit a category by entering details.

Event Flow:

- Visit Home Page
- Select categories list (from side hamburger menu)
- Click on '+' to add a new category
- Even when new activity is being created, in the drop down, if the category doesn't exist, the user can choose to add new category from the option in drop-down.

 After adding/editing a category successfully, success message is shown and user is redirected to Categories list – to see all categories



Use cases	Functional requirements	Choice of best solution:
Scenarios: - Sync with email successful after logging in - Logged in with a different email id than registered one and so, could not sync - Sync failed	Sync with email User can login with an email from profile and choose to sync data with that email from settings	- After logging in and sync email option selected from settings, every 24 hours, the activity and category data is synced with email
 Errors & Constraints: Network or server issues to sync data with email When logged out, cannot sync data. Date of mobile device is changed. The date set is less than last synced date. No new data to sync. 	Visit Home screen Choose Settings option from the hamburger menu Select sync with email to on/off as needed	



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- Once the categories are added, any activity where the specific category is chosen, while adding, would be bucketed under that category. If a category does not exist, user can add it (while adding an activity)
- Each activity can be under only one category bucket
- Each activity can be a part of multiple category buckets

Errors & Constraints:

- Category bucket exceeds max number of activities that can be added at a time.
- Activity has been already assigned to this category

Bucket the To-Do activities in Categories

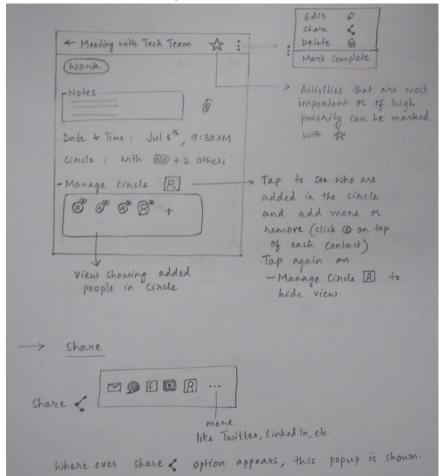
User can choose a category for an activity to bucket it.

Event Flow:

- Visit Home Page
- See activity list (day/week/monthwise)
- Click to add new activity
- When category is chosen while adding an activity, this is automatically bucketed into that category
- Now navigate back to home page and check categories list
- Click on any category. The list of activities bucketed in that category appears.

 After logging in and sync email option selected from settings, every 24 hours, the activity and category data is synced with email

View an Activity





View an activity- shows all the details of a particular activity.

The user can choose to edit, share or delete the activity. User can mark an activity as complete – from the actions given.

If it is an important activity, user can choose to star-mark it.

Manage circle – allows user to add/remove contacts for shared activities.



Use cases	Functional requirements	Choice of best solution:
Scenarios: - View activity details successfully in a new screen - View activity details successfully in a popup - Choose to edit/share/delete or mark the activity as complete from this view successfully - When user clicks an activity from list of activities view, this	View an Activity detail User can view details of the created activity.	- View activity details successfully in a new screen
Errors & Constraints: • Error in fetching details of the activity (Internet or server issue)	Event Flow: Visit Home Screen Click on any activity from the summary view given on stacked cards. The activity can be viewed	



Use cases

Scenarios:

- Right swipe to mark an activity as complete from activity summary list view, activity list view or select an option to mark complete from the activity detail view
- Tap on the circle beside the activity list to mark an activity as complete – from activity summary list view, activity list view or select an option to mark complete from the activity detail view
- Once an activity is marked complete, the text would change to light grey
- Once an activity is marked complete, the text would be struck off
- Once an activity is marked complete, it would be removed from the list

Errors & Constraints:

• Activity status change error – network or server issue

Functional requirements

Allow the user to Mark an activity as complete

User can choose to mark an activity as complete once done.

Event Flow:

- Visit Home Screen
- Click on any activity from the summary view given on stacked cards or click on the stacked card to see the list
- Even from the individual activity view, you can choose to mark as complete while editing.
- Click on the circle beside any incomplete activity to mark it as complete.

- Tap on the circle beside the activity list to mark an activity as complete from activity summary list view, activity list view or select an option to mark complete from the activity detail view
- Once an activity is marked complete, the text would change to light grey



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- From the activity list options, for a specific activity the user can choose to un-mark as completed by left swiping.
- From the activity list options, for a specific activity the user can choose to un-mark as completed by tapping on the circle.
- User can navigate to view the activity detail and then unmark it as completed.

Errors & Constraints:

Status change to incomplete - error - network or server issue

Unmark it as complete, if needed (from activity list view or by browsing the activity details)

User can choose to unmark an activity to complete in-case it is still incomplete.

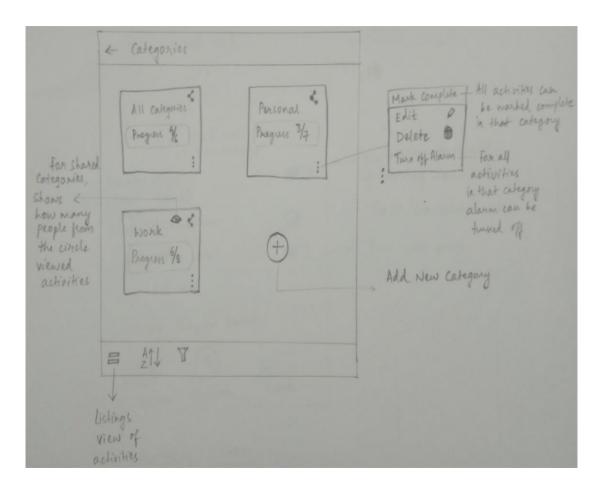
Event Flow:

- Visit Home Screen
- Click on any activity from the summary view given on stacked cards or click on the stacked card to see the list.
- Even from the individual activity view, you can choose to unmark from complete while editing.
- Click on the circle beside any completed activity to unmark it.

- From the activity list options, for a specific activity the user can choose to un-mark as completed by tapping on the circle.
- User can navigate to view the activity detail and then unmark it as completed.

View Category list





View Category list – User can toggle between the list of categories view and list of activities view from the options in the footer.

User can choose to

- Mark all activities within the category to complete
- · Edit category details
- Delete category
- Turn off alarms from the activities with the category



Use cases

Functional requirements

Scenarios:

- From the categories list options, for a specific category the user can choose to mark all the activities to complete successfully
- User need to individually mark each activity to complete and once all activities are marked complete, the category would be marked as complete
- After bulk-marking activities of a category, completed activity list of that category is displayed
- After bulk-marking activities of a category, success message is displayed and redirected to category list
- After bulk-marking activities of a category, success message is displayed and redirected to activity list filtered by that category

Errors & Constraints:

Status change error – network or server issue

Bulk mark all activities of a category as complete

User can mark all the activities to complete within the same category with a single click.

Event Flow:

- Visit Home screen
- Choose Categories from the side hamburger menu
- List of categories is displayed
- Select options and click on 'Mark complete'
- All activities within that category are marked as complete in one go.

- From the categories list options, for a specific category the user can choose to mark all the activities to complete successfully
- After bulk-marking activities of a category, success message is displayed and redirected to activity list filtered by that category



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- While adding/editing an activity, user can set alarm and options to repeat every chosen interval.
- After adding an activity, when the list of activities is displayed, user can choose to set alarm by editing an activity
- From settings, user can choose to enable alarms and by default, while adding an activity, alarm would be set. Incase user does not want reminders, he can disable alarms for that activity.
- Once alarm is set, user would stay in the same view without being redirected to any view.

Errors & Constraints:

Alarm skipped - Mobile in airplane mode/silent profile without allowing any alarms
User location changed to different country – alarm still

User location changed to different country – alarm still functioning as per date and time in original country.

Set alarms to remind the task and choose to repeat

Alarms can be set and repeated every selected interval

Event Flow:

- Visit Home screen
- Click on an activity from day/week/monthly summary list card
- The activity is displayed
- Click on edit option to open that activity in edit mode
- Turn ON Set alarm
- Select repeat interval from 'Repeat Every' drop down

 While adding/editing an activity, user can set alarm and options to repeat every chosen interval.



Manage circle view is displayed in

Use cases

Scenarios:

- Manage circle within an activity new screen comes up allowing user to choose from mail, contacts, whatsapp, facebook, etc.
- Manage circle view is displayed in the same view as that of an Activity detail - when user clicks on 'Manage circle', the options to select from contacts, social media, etc.
- Once the contacts are added to circle, the same view of Activity detail is shown.
- Once for a category, the circle of contacts is selected, then for all activities within that category, the same circle is taken by default. Contacts can be added/removed further.
- Once for a category, the circle of contacts is selected, the same set of contacts are not by default selected for activities within that category.
- Single vs Shared activity types are maintained
- If all contacts from circle are removed, then the activity would be same as individual activity and its type will not be 'Shared'

Errors & Constraints:

Error in adding a contact / removing a contact The selected contact is already added Error in removing contact.

Manage circle by

Functional requirements

adding/removing contacts to share activities

Contacts can be added/removed in case an activity is shared among multiple people.

Event Flow:

- Visit Home screen
- Select an activity from the list
- Activity details are displayed
- Click on edit option and choose to manage circle.
- Contacts sharing the activity can be added/removed.

- the same view as that of an Activity detail – when user clicks on 'Manage circle', the options to select from contacts, social media, etc. Once the contacts are added to
- circle, the same view of Activity detail is shown. Once for a category, the circle of contacts is selected, then for all
- activities within that category, the same circle is taken by default. Contacts can be added/removed further.
- Single vs Shared activity types are maintained and color coding of activities is done accordingly. If all contacts from circle are
- removed, then the activity would be same as individual activity and its type will not be 'Shared'

runctional Requirements	
Use cases	Functional requirements
 Scenarios: Once shared successfully, message is given and existing view would be displayed Once shared successfully, user is navigated to previous screen Once shared successfully, user is given a message, the share options list is closed and the user remains in same view. Errors & Constraints: Error in sharing – network or server issues 	Share (Activity, Category, etc) Users can share activities to anyone – on social media or contacts. Event Flow: For activity Visit Home screen Select an activity from the list Click on share Select from the options – mail, contacts, social media options Event Flow: For category Visit Home screen Select all categories from side menu Click on share Select from the options – mail, contacts, social media options



Choice of best solution:

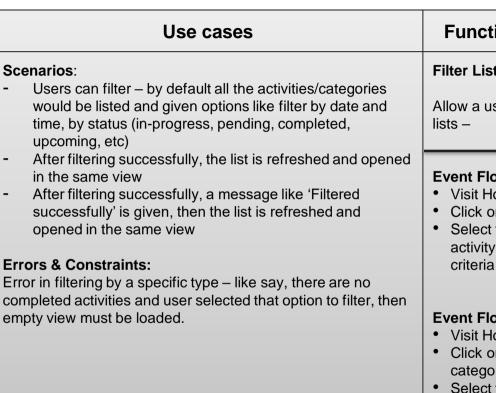
 Once shared successfully, user is given a message, the share options list is closed and the user remains in same view.

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ranctional requirements	
Use cases	Functional requirements
Users can sort – alphabetically by default and given options like sort by date and time, by status (in-progress, pending, completed, upcoming, etc) After sorting successfully, the list is refreshed and opened in the same view	Sort Lists (Activity, category) Allow a user to perform sort on any lists –
 No specific sorting options are given. By default, only the lists are sorted by date and time. After sorting successfully, a message like 'sorted successfully' is given, then the list is refreshed and opened in the same view 	 Event Flow: For activity Visit Home screen Click on any of the stacked cards Select sort option on the activity list
Errors & Constraints: Error in sorting list – cannot sort by the selected type.	 Event Flow: For category Visit Home screen Click on 'categories' option to see categories list Select sort option on the category list



- Users can sort alphabetically by default and given options like sort by date and time, by status (inprogress, pending, completed, upcoming, etc)
- After sorting successfully, the list is refreshed and opened in the same view



Functional requirements

Filter Lists (Activity, Category)

Allow a user to perform sort on any lists –

Event Flow: For activity

- Visit Home screen
- Click on any of the stacked cards
- Select filter sort option on the activity list and choose filter by

Event Flow: For category

· Visit Home screen

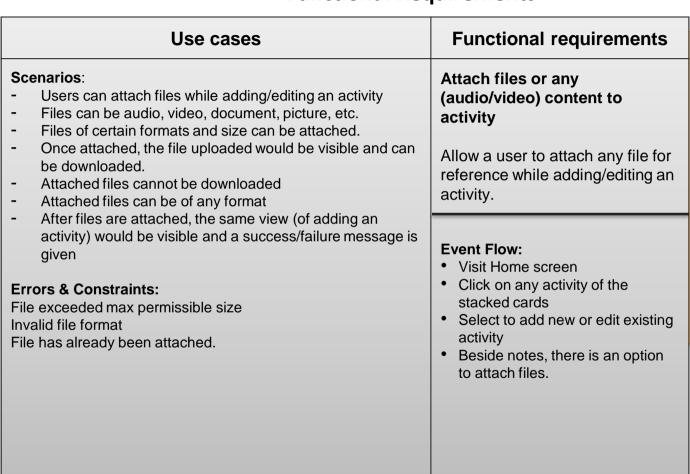
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- Click on 'categories' option to see categories list
- Select filter option on the categories list and choose filter by criteria



- Users can filter by default all the activities/categories would be listed and given options like filter by date and time, by status (inprogress, pending, completed, upcoming, etc)
- After filtering successfully, the list is refreshed and opened in the same view

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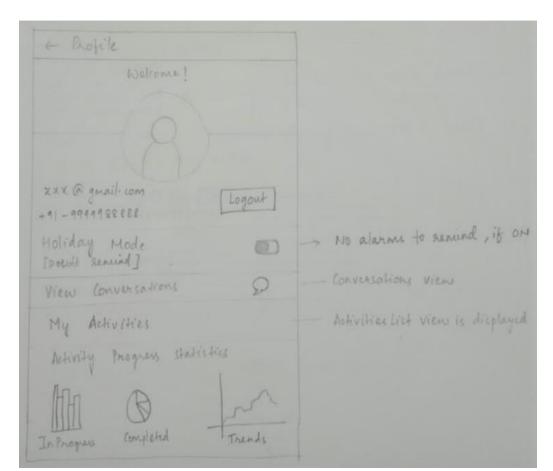




- Users can attach files while adding/editing an activity
- Files can be audio, video, document, picture, etc.
- Files of certain formats and size can be attached.
- Once attached, the file uploaded would be visible and can be downloaded.
- After files are attached, the same view (of adding an activity) would be visible and a success/failure message is given

Profile





Profile screen -

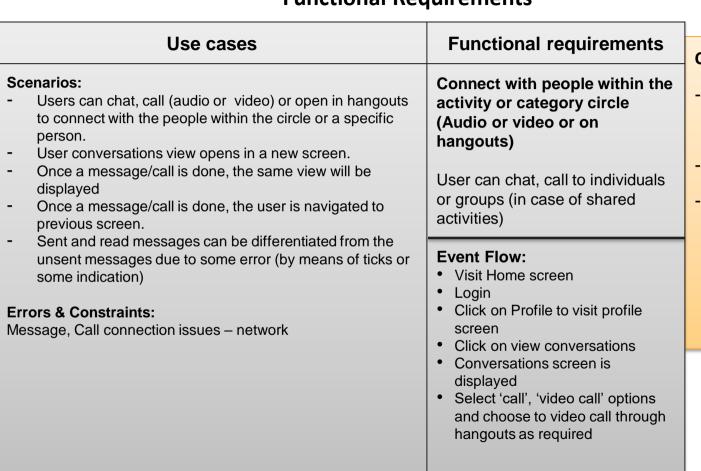
User can choose to

- Set Holiday mode no notifications or alarms would be sent
- · View all conversations
- View his/her activities the activity list page would be opened
- Statistics to enable user to better understand the activity progress

Use cases	Functional requirements
Scenarios: - Users can view profile only if logged in - Users can navigate to profile screen from main dashboard. - Once profile page is viewed, changes like turn on/off Holiday mode to enable or disable sending of reminders - Users can choose to logout from within profile page Errors & Constraints:	View profile User can login, view the profile from main dashboard and then make changes like — enable/disable holiday mode
Login error – network issue Login error – username or password incorrect. Invalid email chosen for login	Event Flow: • Visit Home screen • Login • Click on Profile to visit profile screen • Profile page is displayed
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- Users can navigate to profile screen from main dashboard.
- Once profile page is viewed, changes like turn on/off Holiday mode to enable or disable sending of reminders
- Users can choose to logout from within profile page





- Users can chat, call (audio or video) or open in hangouts to connect with the people within the circle or a specific person.
- User conversations view opens in a new screen.
- Sent and read messages can be differentiated from the unsent messages due to some error (by means of ticks or some indication)



Use cases

Functional requirements

Scenarios:

- Users can view notifications by choosing option from hamburger menu
- Users can see single notification, when it comes as a push notification.
- Scroll list of notifications is displayed.
- Expired notifications are removed from the list automatically
- Expired notifications appear in light grey color and still remain in list until user deletes
- On back press, navigates to main dashboard.
- On back press, exits app.
- Notification actions lets user land on specific screens on app.
- If there is no landing screen, the app's main dashboard must be opened on clicking on push notification.

Errors & Constraints:

Expired notification still appears in the list Notification action does not land on the respective screen, but exits app. Server Error in pushing or receiving notification

See Notifications

User can see the notifications list or a single notification when it is pushed. Respective landing screen is opened on click of particular action from notification.

Event Flow:

- Visit Home screen
- Click on 'Notifications' under the side menu
- All active notifications are displayed which are not expired.

- Users can view notifications by choosing option from hamburger menu
- Scroll list of notifications is displayed.
- Expired notifications are removed from the list automatically
- On back press, navigates to main dashboard.
- Notification actions lets user land on specific screens on app.
- If there is no landing screen, the app's main dashboard must be opened on clicking on push notification.



Use cases

Functional requirements

Choice of best solution:

Scenarios:

- Users can view recommendations by choosing option from hamburger menu
- Users can see single recommendation, when it comes as a push notification – for upcoming activities in the next one hour
- Scroll list of recommendations is displayed.
- Expired recommendations are removed from the list automatically (expiry time is one hour)
- Expired recommendations appear in light grey color and still remain in list until user deletes
- On back press, navigates to main dashboard.
- On back press, exits app.

Errors & Constraints:

Expired recommendation still appears in the list Server Error in pushing or receiving recommendation notification

See Recommendations

User can see the recommendations list or a single recommendation when it is notified.

Event Flow:

- Visit Home screen
- Click on 'Recommendations' under the side menu
- All active recommendations are displayed which are not expired.

- Users can view recommendations by choosing option from hamburger menu
- Users can see single recommendation, when it comes as a push notification – for upcoming activities in the next one hour
- Scroll list of recommendations is displayed.
- Expired recommendations are removed from the list automatically (expiry time is one hour)
 - On back press, navigates to main dashboard.

Target Users for the app



The target users for the Do Today app would be – set of users who are occupied with multiple activities through out the day and wish to organize them – Students, Working professionals, etc.

Typically, 'Busy young Urban (Tier I/ II city) professionals in the age group of 18 – 50 with multiple tasks to handle every day'

User Profile (collected feedback)

Demographics:

Name: Pooja Age: 32

City: Hyderabad Occupation: Designer Marital status: Married Education: M.Des

Technology

Devices: Android

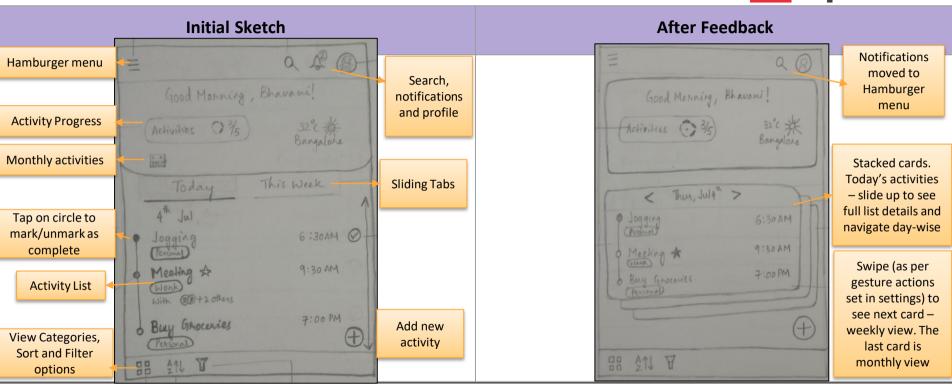
Preferred for Web: Laptop

Preferred Social networks: LinkedIn, Whatsapp, Instagram

Favourite brands: Google, Samsung

Screen No. 1 - Home Screen



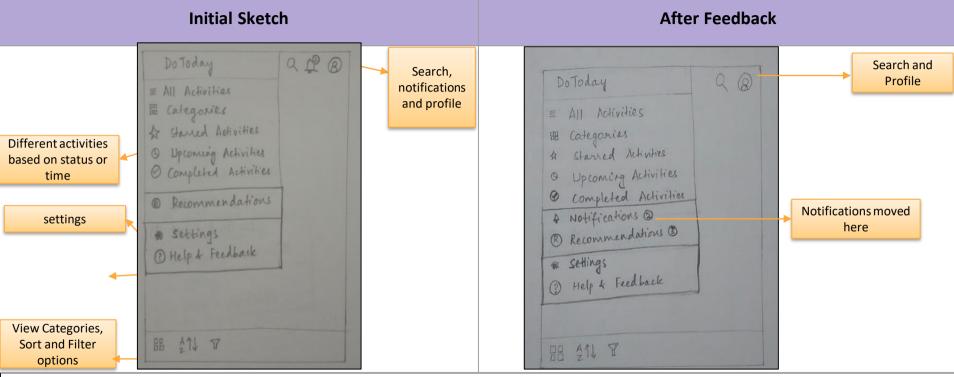


Feedback received from the user: Instead of sliding tabs, user suggested stacked cards
Calendar to view monthly activities replaced by stacked card and user can navigate day-wise, week-wise, month-wise
This is more effective design.

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Screen No. 1a – Home Screen – Hamburger menu

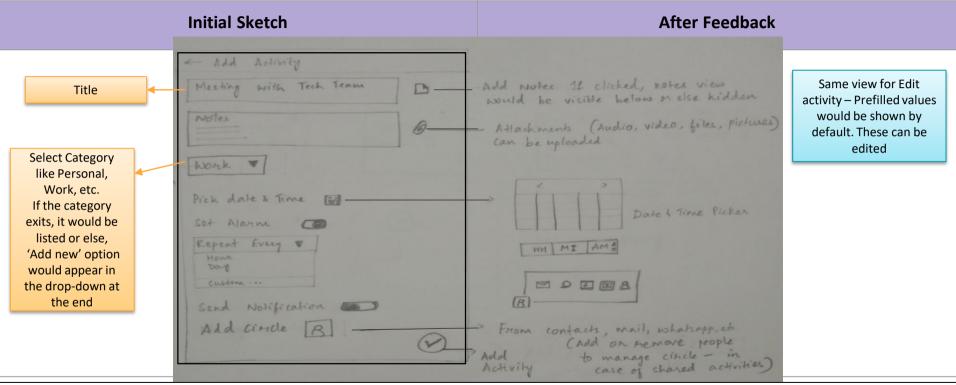




Feedback received from the user: Overall, the options placed in the menu are good. Instead of bell icon, the notifications option also can be added in the hamburger menu. Generally users would see the notification and got to landing page. List of notifications need not be highlighted in the main profile. If hamburger menu has the option, that would suffice.

Screen No. 2 – Add/Edit Activity Screen

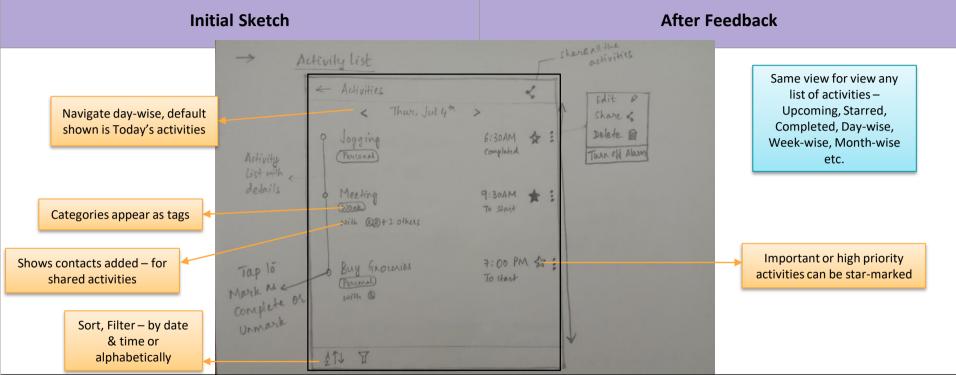




Feedback received from the user: Design proposed is effective. Option to attach files is good. No improvements suggested.

Screen No. 3 – Activity List Screen

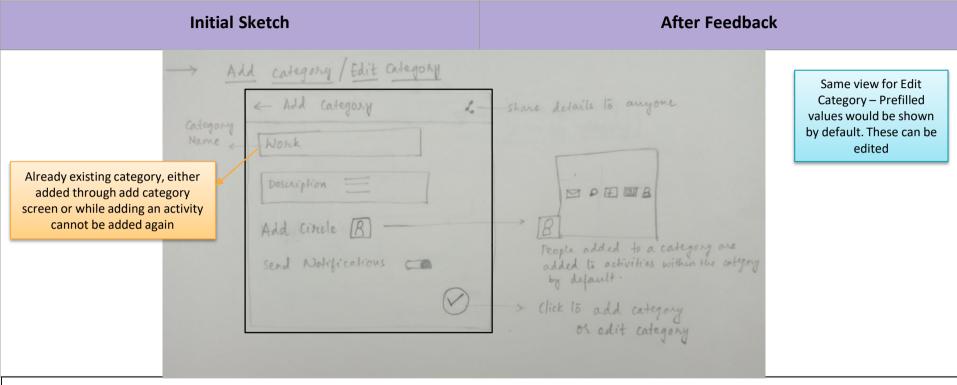




Feedback received from the user: Design proposed is effective. Options to mark activity as important (star) is really thoughtful. No improvements suggested.

Screen No. 4 – Add/Edit Category Screen





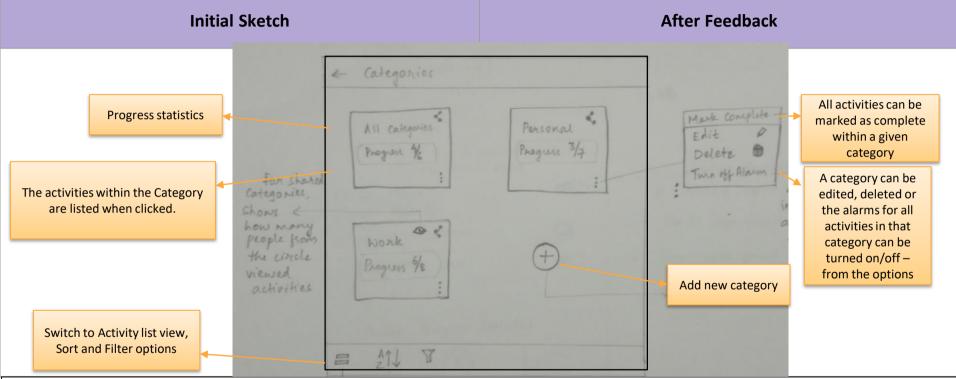
Feedback received from the user: Design proposed is effective. Adding circles for all activities within the category is nice feature. This would avoid adding people each time for every activity.

No improvements suggested.

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Screen No. 5 – Category List Screen

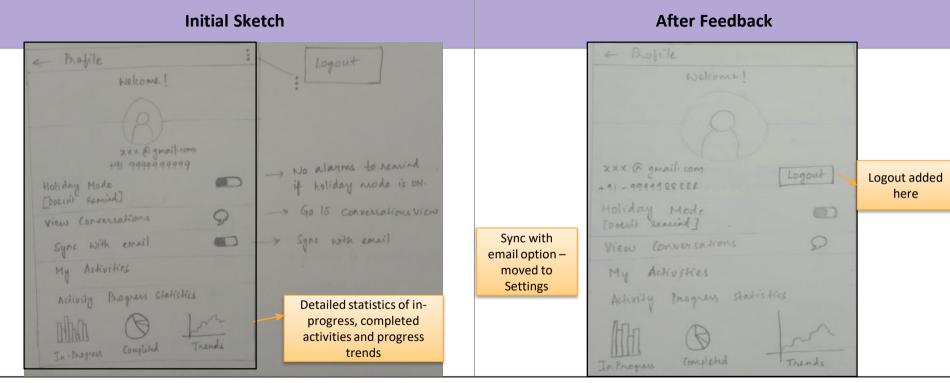




Feedback received from the user: Design proposed is effective. Marking complete – all activities of a category at a time in bulk, is very easy in one go once all the activities of that category are done. No improvements suggested.

Screen No. 6 - Profile Screen



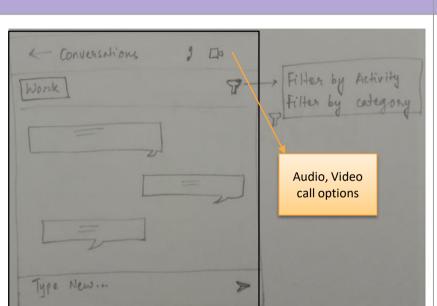


Feedback received from the user: Provision of statistics is good. Logout option can be given in the screen itself instead of placing an extra menu. User suggestion is more effective.

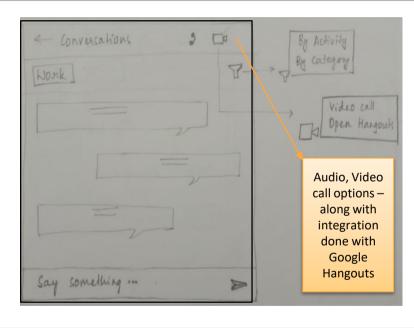
Screen No. 7 – Conversations Screen



Initial Sketch



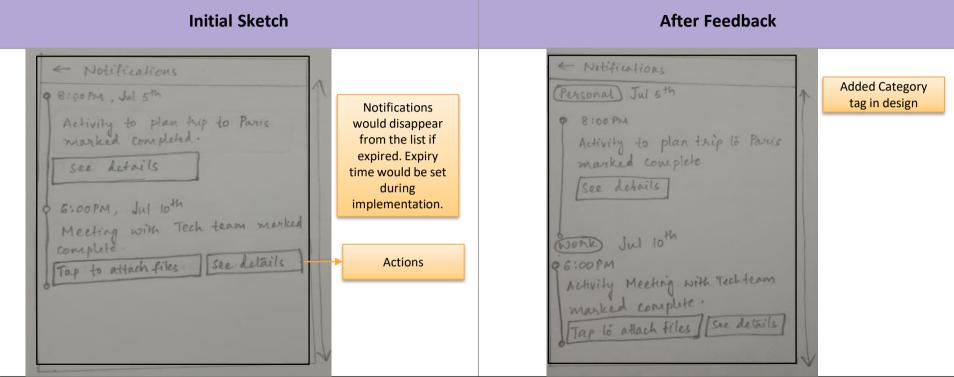
After Feedback



Feedback received from the user: Audio and video call options are great add-on! Suggestion to integrate with Google hangouts so that is any user from the added circle did not install the app, but is sharing the activity, then in case of any discussion, hangouts call can be done. Included the suggestion

Screen No. 8 – Notifications list Screen

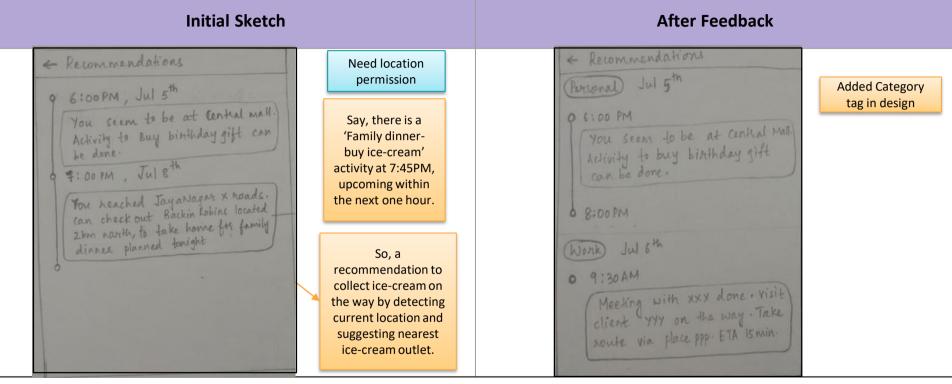




Feedback received from the user: Suggestion to add category tag in the notification list. Otherwise, the design is good.

Screen No. 9 – Recommendations list Screen

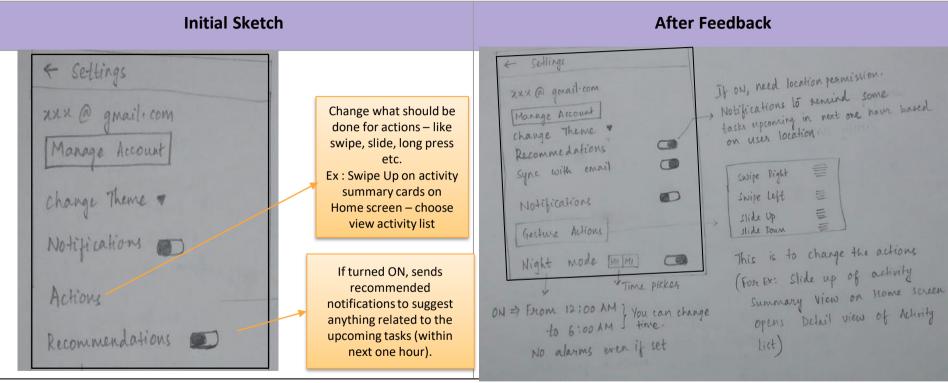




Feedback received from the user: Suggestion to add category tag in recommendations list. Original design changed accordingly to make it more informative.

Screen No. 10 – Settings





Feedback received from the user: Option to add sync with email here instead of Profile screen. 'Actions' text changed to 'Gesture Actions' to make it more clear for the users.

Learnings from User Testing



User has used to-do list apps like Google keep before. Suggested that the design must be minimalistic with most important information right on the home page

The design and flow should be very simple and easy to navigate – such that even on the wearable devices like smart watches the user can use the to-do lists very conveniently

Expectations of web users are quite different from mobile-first users. Here, less number of features where the user need to type must be provided. Some good thing can be provision of first-hand templates for each category of activities – say, personal category would have – pay bill, buy groceries, fitness schedule, plan trips, etc. in the template. User can just edit quickly and make the list of activities.

Response time of the app need to be catered. The design and navigational flow should be such that the app would perform quicker – no need of heavy animations.

The features like *Holiday mode* (catering to user's schedule to not *disturb with notifications*), *Integration with Google hangouts*, ability to *share tasks* with contacts by *adding them to circles*, *recommendations* for the immediately suggesting nearest places to finish other tasks that are scheduled in next one hour – are all nice thoughts.

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