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Unit 2 - Design Doc

Home Screen Activity

Use Cases Screen is Related To:

This screen is the first screen of all the mentioned use cases.

High Level:

Here we will be using images and graphics at the bottom of the menu that will act as a logo for the app. Each menu option will also be a customizable widget with customized text and graphics. The user will navigate to the various other screens by choosing one of the above menu options. With regards to a layout we will be using a linear layout for each of the menu items along with the app title.

Low Level - Activity Lifecycle:

When the app starts (on-start) you will see the menu options that are shown above. The lifecycle of the screen is dependent on when the user clicks on one of the menu option widgets.

Generic List Screen

Use Cases Screen is Related To: This generic list screen will be used in the manage receipts and track payments.

High Level:

Here the emphasis will be more on the functionality rather than design. We will be implementing a scrolling screen here such that the user can scroll through the various receipts/payments. The list items will have the name and date for which the expense was incurred shown on the same line in the list. Each of the receipts/payments will be menu items that navigate to another screen offering a more detailed view. Similar to the home screen we can use a simple linear layout.

Low Level - Activity Lifecycle:

We have a SQLite database which stores all of the receipts. The database contains the information for all of the receipts. This information consists of: the receipt id (primary key), the receipt name, the user ID (the company that will reimburse), the receipt description, the receipt date, the amount to be reimbursed, a user confirmation and a company confirmation. We can tell when a receipt has been reimbursed when both the user confirmation and company confirmation are set to true. If either of those column values are false, then the receipt has yet to be reimbursed.

Upon start of this activity you will see the layout above. This is done by querying into the database to search for receipts matching which list we are looking at. For the "Manage Receipts" screen, we need to search for receipts that have either user confirmation or company confirmation set to false. For "Payment History", we search for receipts that have both values set to true. Each of the menu options leads to more detailed views. The details for each receipt is gotten by querying the database through a specific receipt ID to get the rest of the details of the receipt. Navigation to other screens is done with the user either clicking the back button on the android device or seeing a more detailed view of the menu items by clicking on the items themselves. When either of these two actions happens the activity is paused or stopped.

Details of Payments/Receipts Screen

Use Cases Screen is Related To: This screen is a generic screen that will be used to show the details of receipts that may need to be reimbursed as well as payments for receipts that have already been reimbursed.

High Level:

The generic usage for these screens is to allow the user to see the details of any receipts or payments that have occurred. Perhaps just as important is letting the user also view the receipts for which payments have been made (from the the payment details) or letting the user view the payment details for a receipt that has been reimbursed. Upon clicking on a receipt from the list screen, the details of the receipt will be shown. For both receipts in “Manage Receipts” and “Payment History”, the user will have the opportunity to be able to delete the receipts. The user will also have the opportunity to confirm a reimbursement in this screen as well.

Low Level - Activity Lifecycle:

Upon clicking on a payment/receipt from “Track Payments” or “Manage Receipts”, this screen will be navigated to. On the click, a query is made to our SQLite database to get the receipt information for a specific receipt ID. On the details screen, we get the receipt name, receipt description, receipt amount, and which side(s) have confirmed the payment. From here the user can read the details of whichever receipt or payment he wanted to see. He then has one of two options: to either delete the receipt or to go back to the “Track Payments” or “Manage Receipts” screen.

Take Photo Screen

Use Cases Screen is Related To: This screen will be used in the Take Receipt Photo use case

to take a photograph of a receipt to be submitted for reimbursement.

High Level:

This screen will be very simplistic in nature, to maximize the size of the camera display. There will be a small click button that indicates that the user can click to take a picture. Upon clicking the user will be taken to the Camera Application and take the picture.

Low Level: Activity Lifecycle:

The user will be navigated to this screen when they hit the Take Receipt Photo widget in the Main menu. After clicking a photo, the image is saved on the device, and can be accessed via the Gallery. The user can navigate back to the other relevant screens using the back button.

If the user chooses not to save, the app will return to the Take Photo screen. At any point, the user can exit this screen by hitting the phone's back button.