Item

• Knows information about the item • Can associate with photos • Can associate with tags	• Tags • Photo • Camera • ScannerActivity • CustomList

Tag

• Can associate with items	• Item

Camera

• Takes photos • Stores photos	• Item

MainActivity	AppCompatActivity
• Display a list of items • Handle user interactions, such as adding, editing, and deleting items • Manage user authentication and retrieve the current user's username • Communicate with Firebase Firestore to store and retrieve data • Implement sorting functionality for the displayed list • Support multi-select mode for bulk item deletion	• Item • FirebaseAuth • FirebaseFirestore • CustomList • ScanOrManual • SortItemsFragment • UsernameDialogFragment • ItemViewActivity • EditItemActivity • AddItemActivity • ScannerActivity • Listener

AddItemActivity	AppCompatActivity
• Allow users to add new items to the inventory • Handle user input for item details • Display prompts for missing or invalid input • Provide the option to set the item's date using a date picker • Parse and handle barcode information if available • Confirm and cancel new item addition • Return the entered item details	• Item • ScanOrManual • DatePickerFragment • Tag • Photo • CustomList

EditItemActivity	AppCompatActivity
• User can edit items • Handle user interaction and UI elements associated with editing • Validates user input • Sends edited item details back to the calling activity	• Date • DatePickerFragment • Item • CustomList

CameraActivity	AppCompatActivity
• Requests and checks for camera permission • Creates the camera after obtaining permission • Sets up the camera controller • Communicates success or failure of camera creatiom	• Item • Photo • CustomList • ScanOrManual

CustomList	ArrayAdapter
• Manages a custom ArrayAdapter for displaying a list of items • Supports bulk selection • Handles the display of checkboxes for bulk selection • Maintains a list of selected items • Clears the list of selected items when needed	• Item • MainActivity

Date

• Represents dates for use in Item class • Dates are comparable	• Item

DatePickerFragment

<div align="right">DialogFragment</div>

• Allows user to pick a date • Restricts the maximum date to the current date • Can dismiss dialogue • Can return date to other dialogue or activity	• Date

ItemViewActivity

<div align="right">AppCompatActivity</div>

• Allows user to view item details • Manages UI elements associated with viewing • Allows user to enter edit mode • Allows user to delete item • Sends information back to the calling activity based on user actions (delete or edit)	• Item • CustomList • ItemEditActivity • MainActivity

Interface	
Listener	
• Provides callback methods for communicating between fragments and main activity • Involved in sorting and input operations	• MainActivity • AddItemActivity • EditItemActivity • SortItems

	AppCompatActivity
LoginActivity	
• Allows users to login or signup • Validates user input • Displays toasts to help user • Communicates with Firestone	• FirebaseFirestore • FirestoreAuth • MainActivity

	AppCompatActivity
ScannerActivity	
• Scans barcodes using user camera • Makes API calls to barcode monster • Handles response from barcode monster	• ScanOrManual • BarcodeScanner

ScanOrManual	DialogFragment
• Allows user to choose to scan barcode to input item or input manually • Allows user to cancel and dismiss dialogue • Communicate with the hosting activity using the Listener interface	• Listener • MainActivity

SortItemsFragment	DialogFragment
• Allows user to select what attribute to sort items by • Allows user to select whether sort is asc or desc • User can cancel and dismiss dialogue • Communicate with the hosting activity using the Listener interface	• Listener • MainActivity

UsernameDialogFragment	DialogFragment
• Displays username as a dialogue • Allows user to sign out	• MainActivity • LoginActivity • FirebaseAuth