

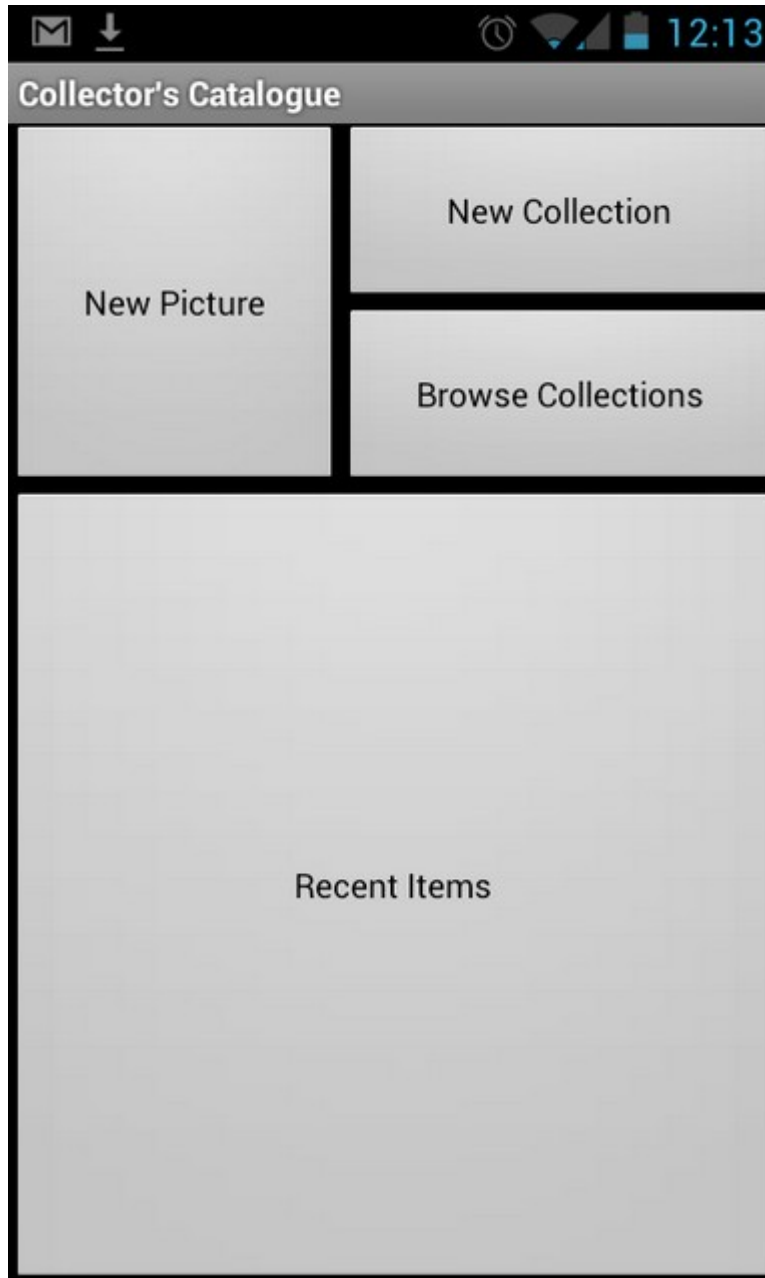
Homework 2
6.813 User Interface
Jennifer Jang

Collector's Catalogue is an Android application created for people who like to collect many different things and may need to organize the things that they collect so as not to buy two of the same thing or forget what they own.

I have noted some good and bad design decisions that the creators of CC taken below. I will use this list of Nelson's (paraphrased) Usability Heuristics to judge each design [*source*: http://en.wikipedia.org/wiki/Heuristic_evaluation]:

1. Visibility of system status: the system should keep the user updated to progress and to give feedback within a reasonable amount of time.
2. Match between system and the real world: The application should use non-technical terms and be understandable to the user, who may not be a UI designer or even a tech-savvy programmer. The application should follow real-world conventions and be logical to the user.
3. User control and freedom: If the user clicks on a wrong button or does something by mistake, the UI should allow the user to easily undo and redo their actions.
4. Consistency and standards: The application should follow platform conventions. Users should not have to interpret words or actions or wonder if different words mean the same thing.
5. Error prevention: An application should at least have good, understandable error messages or, even better, be smart enough to predict some common user errors and present warning messages or guard against errors occurring in the first place.
6. Recognition rather than recall: The user should be able to figure out how to use the application without having used it before. He should not have to remember information from previous pages or uses; rather, make the application detailed and easy for first-time users to figure out how to use.
7. Flexibility and efficiency of use: Expert users should be able to do simple tasks faster (i.e., with shortcuts) while novice users could learn the interface through more obvious means. This way, both novices and experts can utilize the design efficiently.
8. Aesthetics and minimalist design: The application should not have unnecessary fluff.
9. Help users recognize, diagnose, and recover from errors: Error messages should be readable, understandable, and helpful.
10. Help and documentation: The application should include an easy to read, easy to search help and documentation.

1. Good Design: Front Page

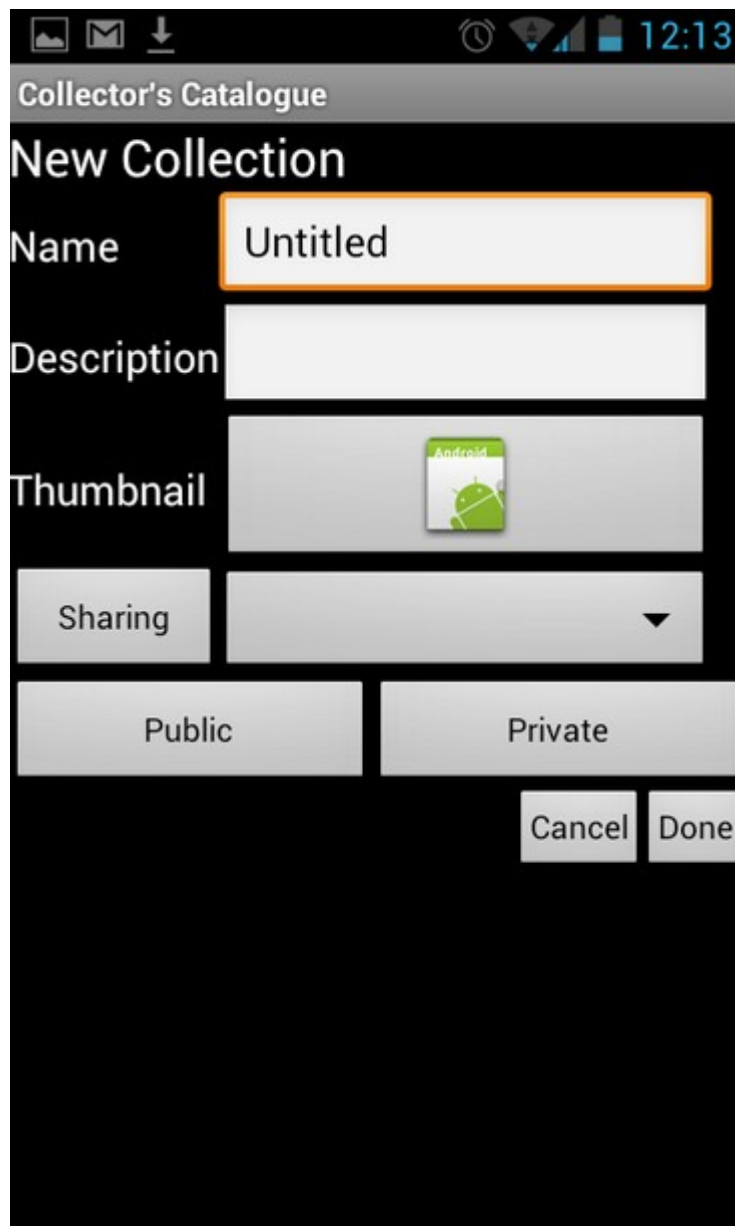


When I first start the application, I come across a main screen with four large buttons. I really like the user interface here; the buttons are large and clear and look fun to click. Since I'm likely using the application on my phone, I don't want to have to click on small links or buttons with my fat fingers and having the phone start loading another link instead. This happens often with websites and other applications and is a great waste of time.

This page of the application positively showcases several of Nielsen's usability heuristics/ Thus, we have great **recognition rather than recall** since the first-time user can know exactly what the buttons do just by reading the clear labels. While it is not shown in the screen shot, there is also **user control and freedom** as users can also easily go forwards and backwards at any time (this is internally supported by Android phones as well). For frequent users, the buttons are also large enough that it is

hard for them to make mistakes. In addition, the buttons are consistently placed: the largest button is for recent items, which makes sense since as the collector adds items, there will be many of them to display. The two buttons related to collections are stacked and similar in size, so they will be easy to find and click on. Lastly, the button for pictures is shaped like a picture and so is intuitive to use as well. These features contribute to **flexibility and efficiency of use** as well. Finally, I loved the **aesthetic and minimalist design** of the page. While nothing on it is unnecessary, it is also not lacking in directions that makes it harder to understand and use.

2. **Good Design:** New Collection Page



It was intuitive enough to go to “New Collection” and create a new collection. While I found the “Sharing” button and private/public buttons problematic (see #3 and #4) I thought the point of this page is clear: enter a name, description, thumbnail, and designate a circle to share this collection with. Once again there is good **user control and freedom** since first, if the user decides that he no longer wants to

create an album or clicked on this button by accident, he can just press “cancel” and return to the home page. Second, if the user types a wrong name or description or selected the wrong icon, he can easily retype and reselect those items. Finally, if the user selects the wrong privacy options, those choices can be undone and redone as well. As for **consistency and standards**, the minimal words used on this page have clear meaning: name of the collection, description of the collection, thumbnail for the collection, sharing options, etc. Because the interface is so intuitive and easy for first-time users, we have great **recognition rather than recall** as well. The interface is **minimalistic** because it does not look cluttered, but can probably be reduced and reorganized further.

3. **Bad Design:** “Sharing” button.

I disliked the “Sharing” button and the drop-down menu next to it: is the word “sharing” a label for the drop-down menu, or is it a link to a different page? Also, does clicking on the button take you to a page that allows you to customize privacy settings? Upon further inspection, it seems like the drop down bar is supposed to be populated with a list of names after you've gone into the “Sharing Collections” page and added a few people to share this with. However, without going into the page, it is impossible to know what this button and drop down bar really means. In fact, when a user first uses this application, there will be nothing in the drop down bar and so he will be confused about what this does as well. The “Sharing” button displays poor **recognition rather than recall**: if you haven't used this application before, you wouldn't know whether or not you should click on this button in order to set private/public settings or something else. Also, there is poor **consistency and standards** as a “sharing” button does not automatically make me think that I should get a list of contacts ready that I want to share this collection with. Rather, it makes me think that I am about to set some privacy settings on this album (i.e. friends only, everyone, or only me). In the age of Facebook and iPhones that use the word “sharing” differently, this button does not display great **match between system and the real world**. This interface and labeling fault seems easily fixable, though, so it is only a minor flaw.

4. **Bad Design:** “Public” and “Private” buttons

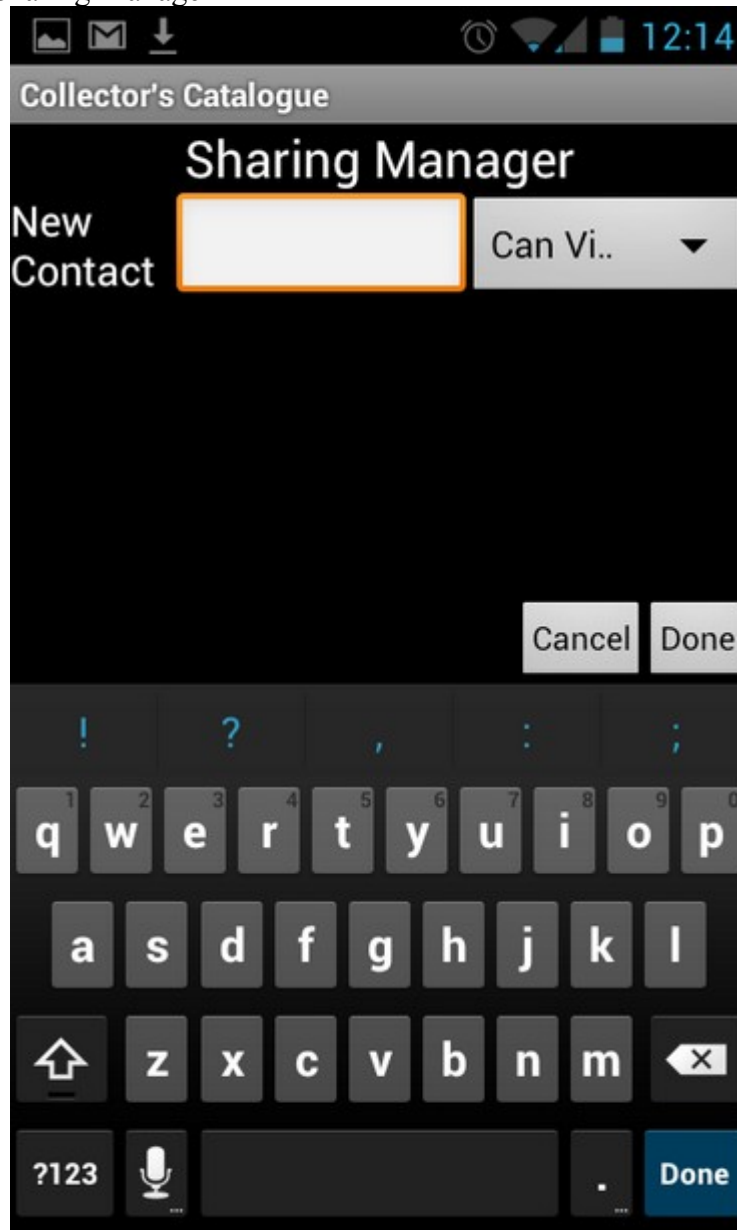
Even though the events Public and Private are mutually exclusive, the two buttons stating “Public” and “Private” don't look mutually exclusive. In fact, they look like buttons that will lead the user to a different page rather than set a privacy setting. This is a poor **match between system and real world** since most buttons should be links to different pages, but since this is case of using the wrong type of button, the flaw is cosmetic. There is also poor **user control and freedom** since if you accidentally click Public but you wanted to set the collection as private, how do you undo your previous action? Just by clicking private? There is no positive response from the system that lets you know what you've set your settings as or confirming your choice, demonstrating poor **error prevention**. The act of setting something as public when it is supposed to be private could have devastating consequences for the user, so these issues could be considered major or even catastrophic, depending on the contents of the collection.

5. **Bad Design:** Use of both “Sharing” and “Public” and “Private” buttons

The use of both the public/private buttons and a sharing link goes against **aesthetic and minimalist design**. Why would the designer use two completely different sets of buttons and bars for the same function: choosing privacy and sharing options? One suggestion would be to merge these two similar functions into one page and have a single button called “Choose Privacy Settings” that allows you to choose both who you want to share this with and whether the page should be public or private. This is a minor usability flaw since it is easy to fix and does not directly affect the true function of the

application.

6. **Bad Design:** The “Sharing Manager”

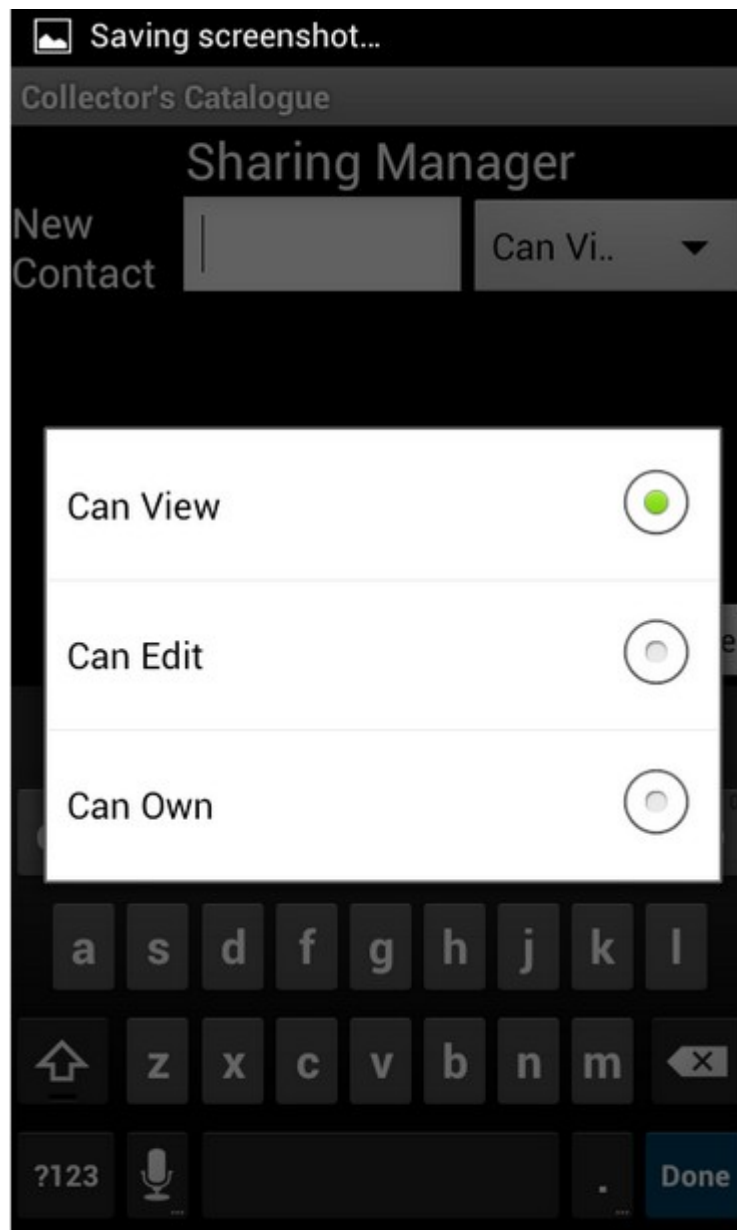


The Sharing Manager is confusing. Is it a place to add people to *share* the collection with? If so, the page and the button that led to it should be clearer (for example, say “Share with Friends!”). Thus, this part of the application demonstrates poor **consistency and standards** since users will have to guess what the developers meant by sharing, which on social networking sites in the format that was presented leans more towards the meaning of “privacy/share settings” rather than people with whom to share with. This is a semantics and labeling problem that can easily be fixed, however, so the error is minor.

7. **Bad Design:** Adding Contacts

In the “Sharing Manager,” you are supposed to be able to add a list of contacts with whom to share your collection. However, it appears that you can only add one at a time—after you choose a contact, you press “done” and the application takes you back to the previous “New Collection” page. While this may be easy to figure out for a new or infrequent user, it does not show good **flexibility and efficiency of use** for long-time users who may want to add a few contacts at once without having to toggle between the pages. One suggestion would be just to include an “Add” button below “New Contact” so the user can add as many contacts as he would like. While this would be an important addition, the error itself is minor because it is easily fixable and does not affect that actual function of the program (it still works fine).

8. **Good Design:** Radio Buttons



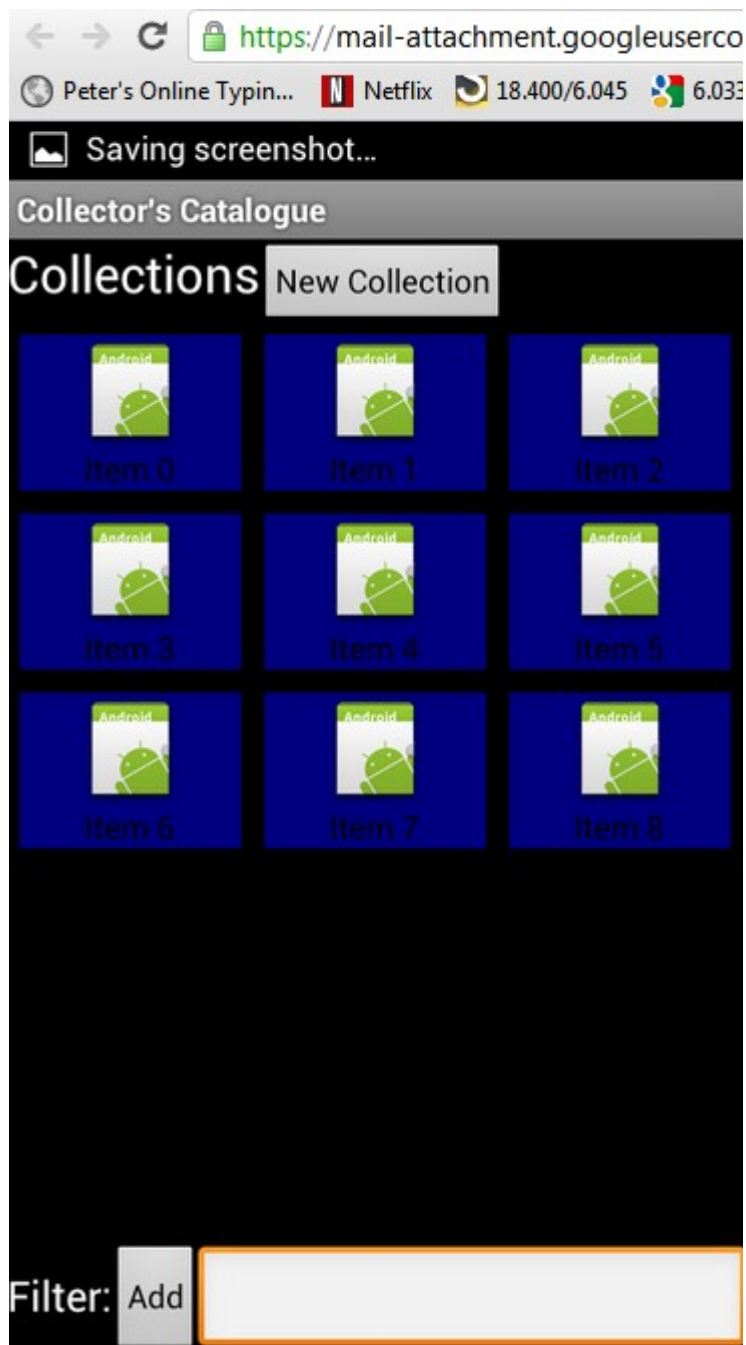
I liked the use of the drop down menus and radio buttons that allow the user to select a choice. These buttons are used in the *New Collection* page and here, in the *Sharing Manager* page. The choices pop

up on the screen in a white background, and the rest of the background is blurred/blacked out. This makes the choices easy to see and easy to choose from. The text and the buttons are big as well, and the screen doesn't disappear until the user is sure of his choice, demonstrating **user control and freedom**, and taps outside of the window. This use of a conventional pop-up window and set of radio buttons is a good **match between system and outside world** (or outside world of applications and websites the user probably has used before). The radio buttons signal that you can only choose one of the choices listed, and the popup window clearly marks that the user should pay attention to it at this time. The short phrases displayed (“can view,” “can edit,” “can own”) are also relatively intuitive to the user: can this person own, view, or edit the collection? However, the details of this are unclear, and I as a first time user was confused about how someone can own or edit my collection.

9. **Bad Design:** “Can View”/”Can Edit”/”Can Own”

There is very little **help and documentation** for this part of the application, but I'm confused about what it really means. How can a user's contacts own his collection? What does that entail? Likewise, during the first time a user sees these choices, he will likely be confused about what it means for someone else to be able to edit or own his collection. The UI is unclear about these terms and there is no where for the user to go to find out more. There should be at least a sentence or two explaining the meaning of each of these three buttons. Since these things can be easily appended to the application, this problem is minor.

10. **Good Design:** “Collections” Page Layout



The top half of the collections page is quite easy to understand. The user has a list of collections, and their icons are displayed. If the user wants to create a new collection, he can click on the “New Collection” link. The way the collections are displayed makes it easy for a user to find and click on the right collection as well because it is a good **match between system and the real world** due to its bulletin-board-like organization and recognizable photos. It is easy to recover from clicking on the wrong collection as well, so there is great **user control and freedom**.

11. **Bad Design:** Collections Icons

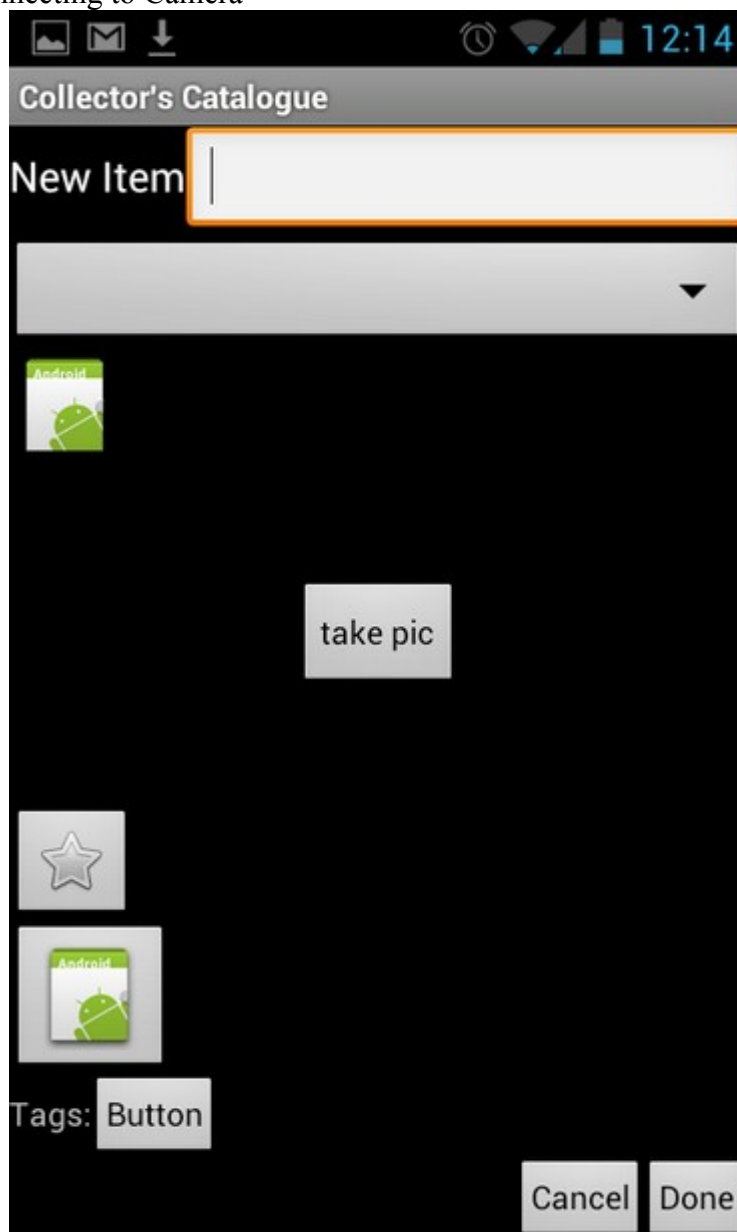
I dislike the blue on black background as this is hard for me to read and is a rather ugly color

combination anyway. In addition, the labels of the collections (“Item N”) are confusing: are these items or collections? Why not call them collections if they are collections? Or are they items that are part of collections? This is a cosmetic flaw to **consistency and standards**.

12. **Bad Design:** Adding Filters

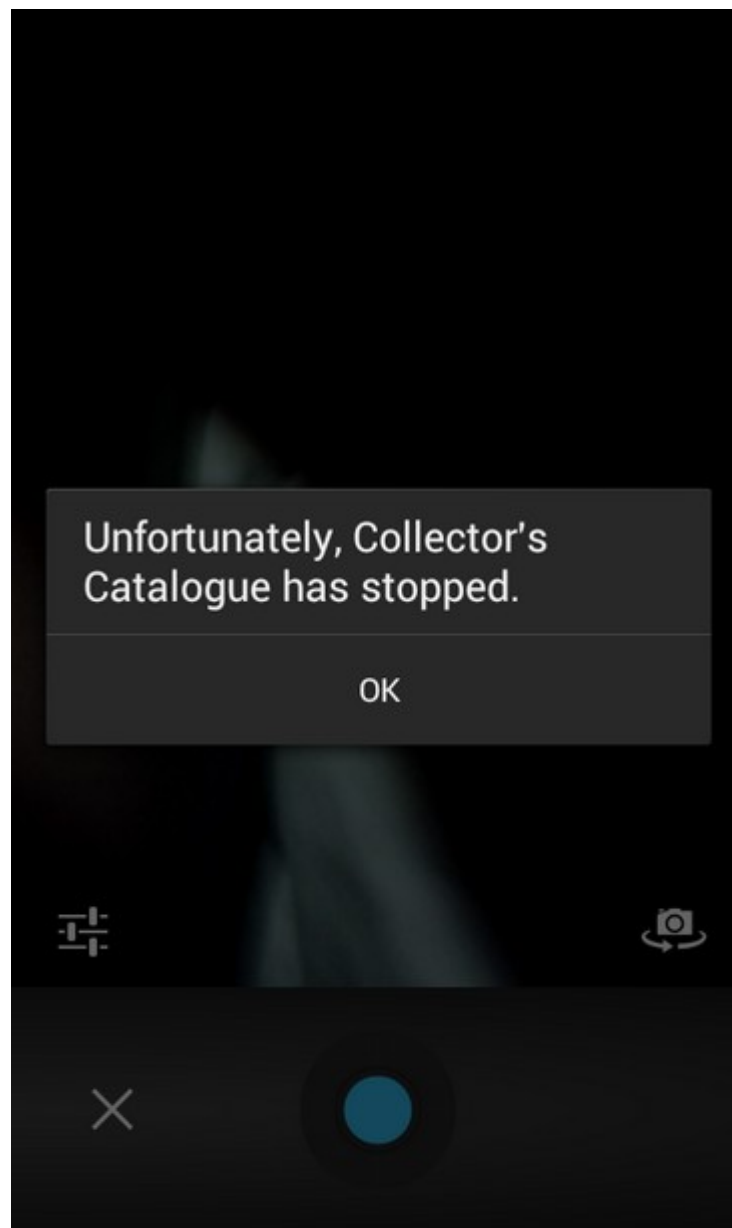
Is the filter a search bar? Is it supposed to be used for searching (lack of **consistency and standards**). What does adding a filter do? Does it go into a list of saved filters that you can use again later, or is it used when you want to search more than one tag at a time? How do you get rid of a filter after you've added it, then? If a user cannot return to a previous filter state, this demonstrates a lack of **user control and freedom** and could be quite problematic. The lack of clarity here could be considered a major flaw because of its apparent lack of undo/redo control and possible consequences (users can't search!).

13. **Good Design:** Connecting to Camera



Despite the fact that the rest of this page either is either rendering wrong on my phone or just looks like a trainwreck, the *take pic* button is a nice touch. Clicking on the *take pic* button takes the user to the phone's camera, where the user can quickly snap a picture of their item. This makes is so that the user doesn't have to close the application, open their camera and take a picture, and open their application again to choose the picture from a list and upload it. This button displays great **flexibility and efficiency of use** and **visibility of system status**: as soon as the user presses the *take pic* button, the camera controls pop up and it is obvious from the start that the application took the user to the phone's camera. Since this also follows platform conventions, our page also exhibits **consistency and standards**. Since the button is pretty well-labeled (“take pic” is clear and obvious), this contributes to **recognition rather than recall** as well.

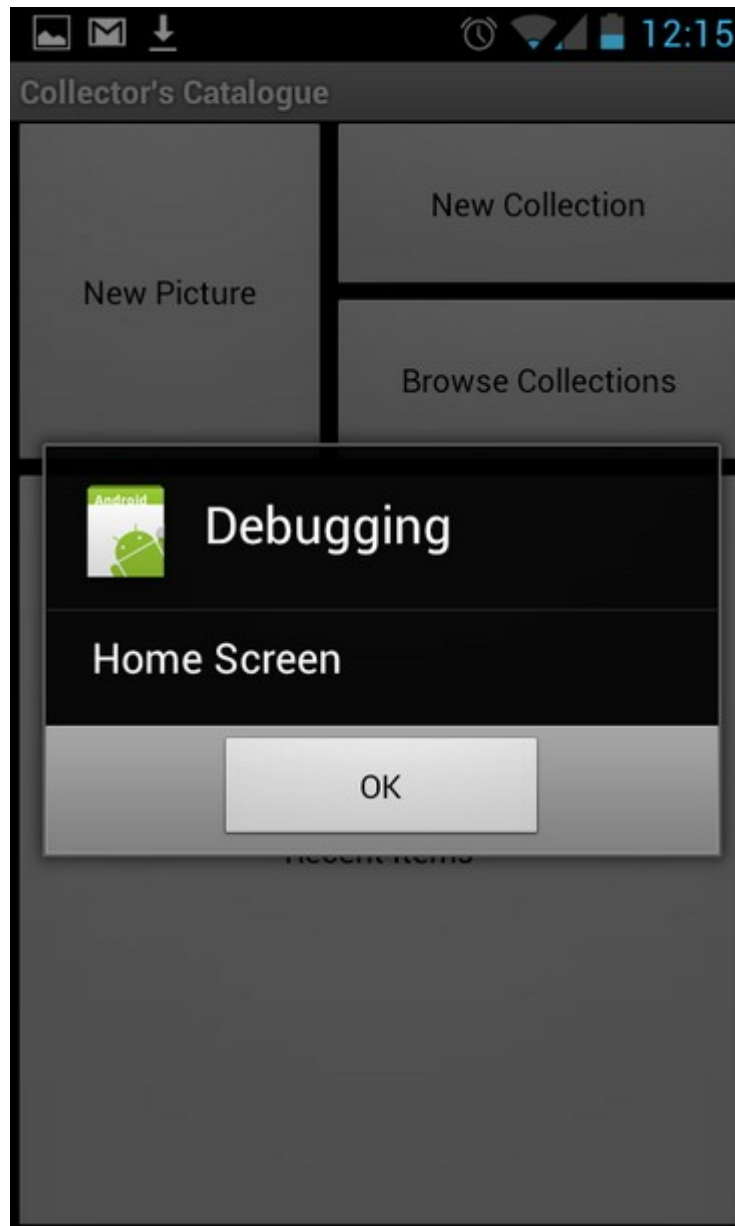
14. **Bad Design:** Camera



When I try to run the camera, however, Collector's Catalogue crashes. There are no error messages and all of my work is lost! This feature demonstrates poor **error prevention** and the ability to **help users**

recognize, diagnose, and recover from errors. Depending on how much time I've spent on unsaved data, this crash could be a major or catastrophic fault.

15. **Bad Design:** All these error messages



At quite a few areas along the way of browsing CC, I came across some debugging messages that look like error messages. If they are debugging messages, then they should be left out of an application before it ships (obviously). If they are error messages, they are not very informative (lack of ability to **help users recognize, diagnose, and recover from errors**). Either way, the fault is minor, since pressing OK seems to bring the application back to where it is supposed to be.

The final verdict is that this is a great idea for an application, and one that I might even consider using, if a few usability flaws ranging from cosmetic to catastrophic were fixed for the final version.