

Android Mobile App Development

Lab 1

Name:

Honore Peter Joy
Ndayishimiye

AndrewID:

hndayish

November 8, 2022

**Carnegie
Mellon
University**
Africa

Question 1:

Describe at least one design principle from each of the chapters (1, 5, and 6)

Answer:

Chapter	Principle	Principle Description
1. App Navigation and Exploration	Allowing User to go back easily in one step	<ul style="list-style-type: none">- It can be hard for me to say that I have never used back button in the app. This emphasizes that any time user clicks to open a view or a page there is always an intention to go back one step to the previous view interface. When it is difficult to navigate around an app using back button it brings frustrations to the users and they may attempt to uninstall the app. The key takeaway from this principle is that developers should consider adding back buttons to increase the value in helping users to switch.
	Show the value of your app upfront.	<ul style="list-style-type: none">- This concept states that it is preferable to grab the attention of users by presenting their tasks in prominent places, particularly in the top - center. Another great practice is to highlight the new App's features in the context. When an app has a clean interface that shows key actions to do, it improves the user's navigation experience.
5. Form Entry	Communicate Form error in real time.	<ul style="list-style-type: none">- Humans are, by nature, more prone to making errors. This also applies to form filling, when users may mistakenly miss certain required fields. Using this principle, it is preferable to deliver real-time error alerting messages rather than waiting for the user to hit the submit button.
	Matching the keyboard with the required text inputs.	<ul style="list-style-type: none">- Form fields, as we all know, are intended to receive input of various types, such as letters or numbers. When a user clicks on a field and receives a keyboard that is not the sort of input they anticipate, they become frustrated. Because of this issue, developers are advised to utilize keyboards that correspond to the intended inputs. For instance, if the inputs are numbers, the keyboard should only have numbers.


6. Usability and Comprehension	Providing text labels and visual keys to clarify visual information.	<ul style="list-style-type: none"> - In the actual world, construction engineers normally put signs on the entrance of buildings indicating that smoking is not permitted, and we may learn from this that these signs are insufficient, therefore they add a descriptive phrase stating, "No Smoking Allowed." Using this idea, app developers should provide descriptive labels at the top or bottom of icons or other types of images. This improves the usability of an application.
	Be responsive with visual feedback after significant actions.	<ul style="list-style-type: none"> - Personally, I always like the feedback comments offered by Gmail whenever I send an e-mail since it gives me confidence that my activity has been accepted or done. Then, as stated in this concept, all apps should have notifying feedback after performing a certain activity.

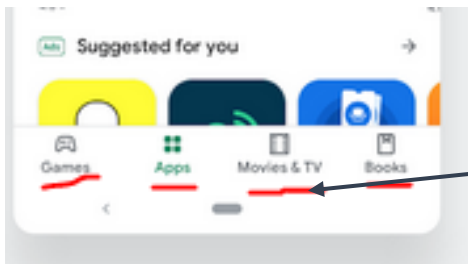
Question 2:

provide and explain a concrete example of apps you've used that either do a good job, or not, of illustrating these three principles

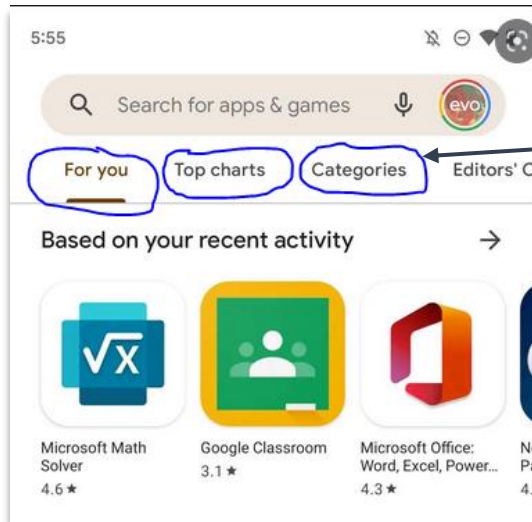
Answer:

Applications that follow the above design principles

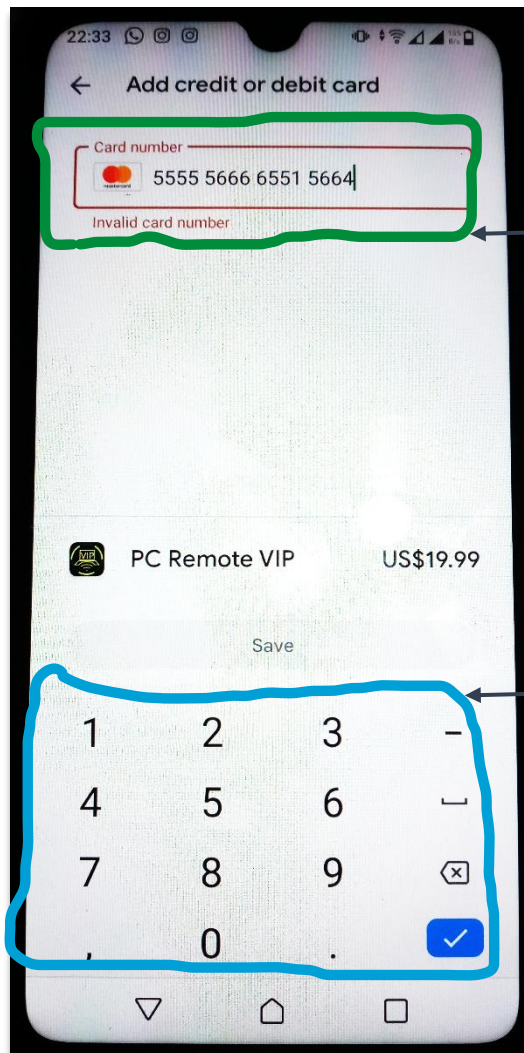
1.  **Google play store App:** it is a Google's official distribution site for Android apps and other digital products such as music, movies, and books.



By looking at the icons highlighted with red color we can see that Play Store applied this principle of **providing text labels and visual keys to clarify visual information.**




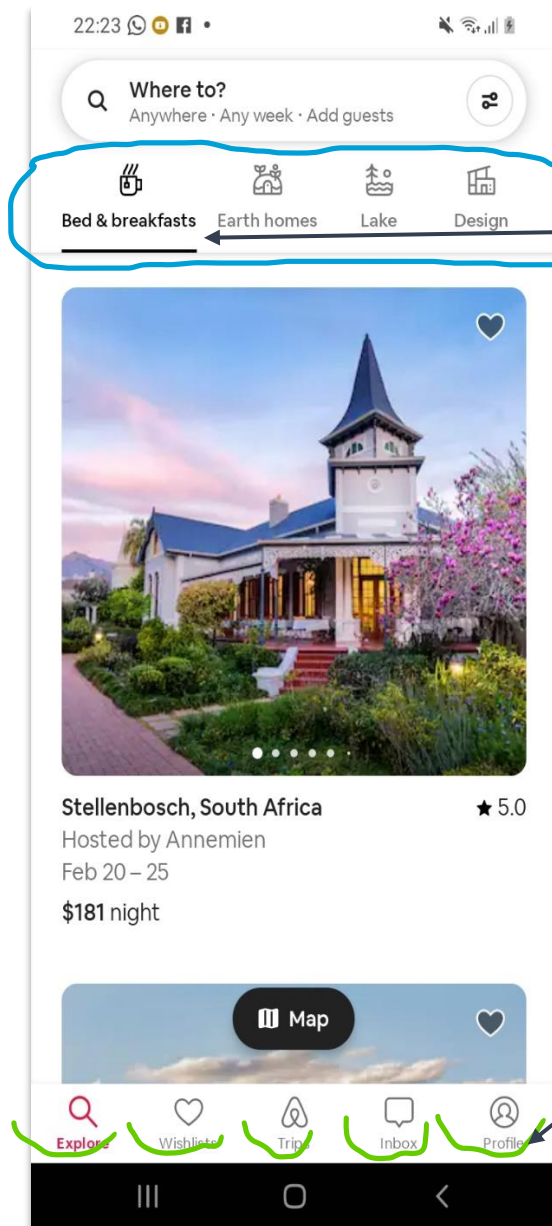
By looking at the icons highlighted with blue color we can see that Play Store applied this principle of **showing the value of the app upfront.**



By looking at the field encircled with green color we can see that Play Store applied this principle of **communicating Form error in real time.**

By looking at the keyboard encircled with blue color we can see that Play Store applied this principle of **matching the keyboard with the required text inputs.**

2.  **Airbnb App:** allows you to talk with your Host, get up-to-date information on your booking, and make the most of your trip by acquiring the greatest local information that only expert Hosts would know. A revamped Trips page consolidates all your important trip information in one place.



By looking at the tab icons highlighted with blue color we can see that Airbnb applied this principle of **showing the value of the app upfront.**

By looking at the icons highlighted with green color we can see that Airbnb applied this principle of **providing text labels and visual keys to clarify visual information.** Like clarifying “profile”, “inbox”, “trip”, “wishlist” and “explore”

22:32

✕ Add phone number

For notifications, reminders, and help logging in.

Country/Region
Rwanda (+250)

Phone number
7

We'll call or text you to confirm your number. Standard message and data rates apply.

Continue



By looking at the field encircled with green color we can see that Airbnb applied this principle of **communicating Form error in real time**. And we can see that at the second field after filling the required inputs the field color turned into black.

22:32

✕ Add phone number

For notifications, reminders, and help logging in.

Country/Region
Rwanda (+250)

Phone number
(780) 258-266

We'll call or text you to confirm your number. Standard message and data rates apply.

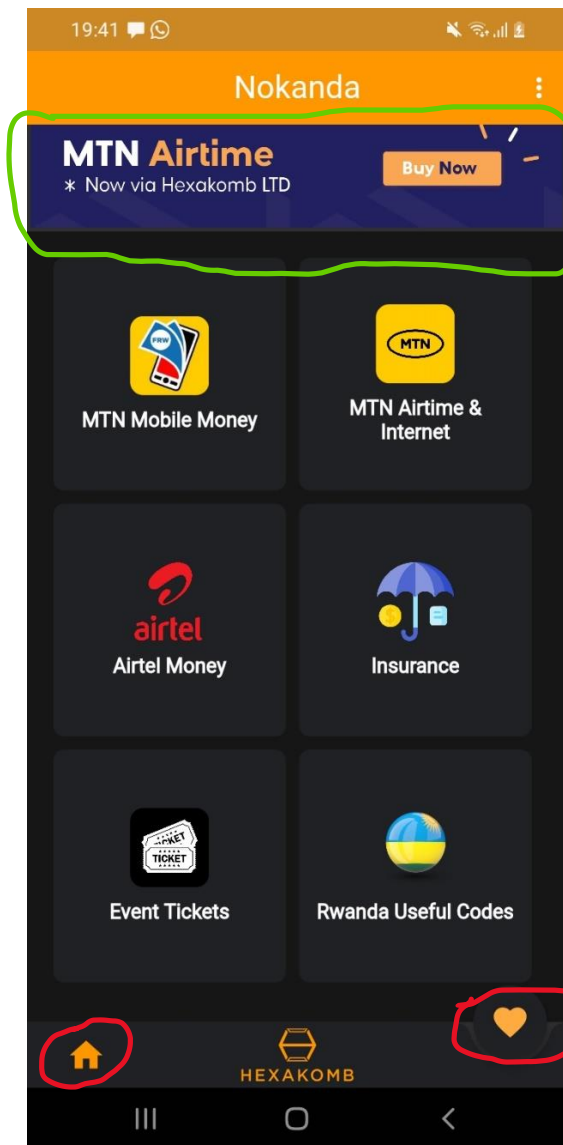
Continue



By looking at the keyboard encircled with violet color we can see that Airbnb applied this principle of **matching the keyboard with the required text inputs**. In this context I was supposed to enter my phone numbers only.

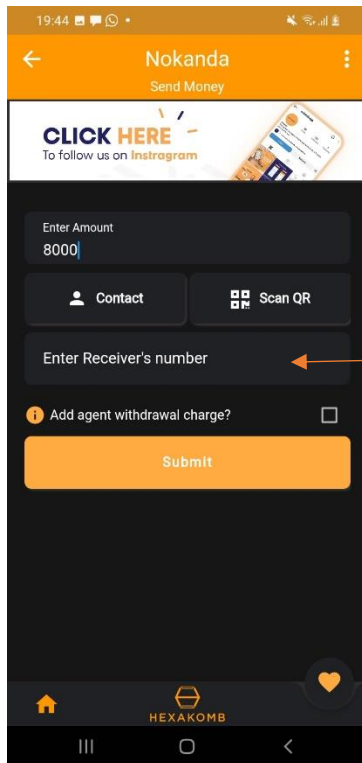
Application which doesn't follow all the above principles

1. **nokanda** **Nokanda:** This mobile app makes it easy to pay fundamental services such as airtime, data bundles, cash power tokens, and money transfers. Its main goal was to save the time taken to write USSD codes to accomplish certain task. The main clients of this app are Rwandans.



By looking at the area encircled with green color we can see that **Nokanda** did not apply this principle of **showing the value of the app upfront**. Instead of doing that they put ads banner at the top.

By looking at the icons encircled with red color we can see that **Nokanda** did not apply this principle of **providing text labels and visual keys to clarify visual information**.



Other anomaly found in this app is that developer did not consider the real time form validation till the user click on submit button and get error on next steps and this violate the principle of **communicating Form error in real time.**

