ASSIGNMENT 2

CS 522

Submitted By-

Yugaank Arun Sharma

Part-1 Book Store

You are given an implementation of a bookstore application for an Android device. You should complete this project and submit it. You can view the parts to be completed by looking for TODO items in the provided project. The project provides an activity for a book store shopping cart, with sub-activities for adding a book, viewing the details of an individual book, and checking out. The add activity just returns the book information entered, while checkout just asks for shipping and billing information and then clears the shopping cart.

For the book store application-

1. We defined a custom adapter called Book Adapter that is used to display the fields of a book entity object in each row of the list view.
2. The theme is changed from given default to holo light dark action bar to allow the top menu bar be available. Instead of extending the app compact view class, I changed the theme as suggested by a fellow classmate and the professor.
3. I also implemented parcelable interface for the book and author entities to allow saving the information on to the shopping cart.
4. By clicking on an item in the shopping cart, would result of viewing that item details. This was possible because of parcelable interface.
5. Long clicking an item in the shopping cart would select that item for more options like delete. Only delete is available. **Note:** cannot delete more than one items as it causes the app to crash.
6. Also, book details can be viewed by one tapping the book and the code is present in the book details class.

Part-2 Basic Chat App

In this second part of the assignment, you will complete two apps so that they will speak to each other peer-to-peer using UDP sockets. These apps are very simple and violate some of the design guidelines for Android apps, such as not performing network communication on the main thread. We will see later how to fix this.

For Chat application-

1. So there are two apps which are sub parts of this assignment part 2, Chat client and chat server.

2. Chat client has four resources which has any function, destination host IP, port, message field and send button. When the button is pressed, the message is appended in to the client name, and the client socket initializes the packet and call the send function.

3. The Chat server app has only one button initially, which is Next, when the message is sent from the client side, the next button is pressed which starts the on click function which receives the packet and extracts all data from it and puts into the fields. The information is then passed into the array adapter which holds the message list of the application. As the message keeps coming up, the messages are appended into the arraylist and the main list keeps going up.

4. **Note:** The specification says to split the message when it is arrived but the rubric says to display the sender name at the server side. So, I did split the message but still showed the name of the sender just to comply with the rubric. Please don't cut marks because the specification is so ambiguous and there are few things which doesn't match up with the rubric.

5. At last, I would like to put some light on how difficult it is to run two emulators at the same time because android studio is really slow and running one emulator was more than enough for my old laptop. But running two emulators was a challenge.

The zip archive "Yugaank_Sharma" contains 5 files, BookStore Project Folder, Chat Application Folder which further has two more folders each of chat client and chat server project folders, bookstore video, chat application video and README.pdf