

Mobile Dev A3.2P

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Part 1

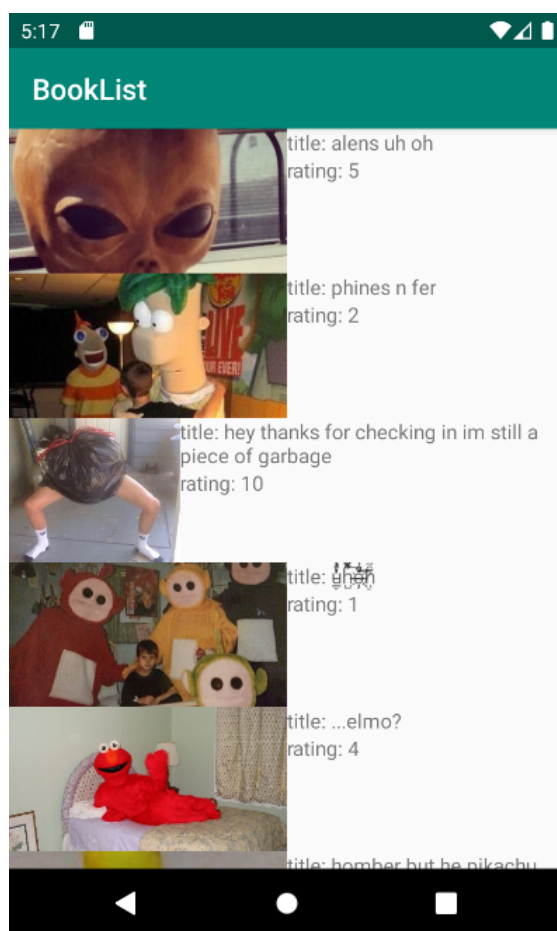


Figure 1: Screenshot of the application working

```

class BookEntryRecyclerAdapter : RecyclerView.Adapter<RecyclerView.ViewHolder>() {

    private var items: List<BookEntry> = ArrayList()

    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): RecyclerView.ViewHolder =
        BookEntryViewHolder(
            LayoutInflater.from(parent.context)
                .inflate(R.layout.book_display, parent, attachToRoot: false))

    override fun getItemCount() = items.size

    override fun onBindViewHolder(holder: RecyclerView.ViewHolder, position: Int) {
        when (holder) {
            is BookEntryViewHolder -> holder.bind(items[position])
        }
    }

    fun submitList(bookEntryList: List<BookEntry>) {
        items = bookEntryList
    }

    class BookEntryViewHolder constructor(
        itemView: View
    ) : RecyclerView.ViewHolder(itemView) {
        val title = itemView.txtTitle
        val rating = itemView.txtRating
        val image = itemView.imgBook

        fun bind(bookEntry: BookEntry) {
            title.text = "title: " + bookEntry.title
            rating.text = "rating: " + bookEntry.rating.toString()
            image.setImageResource(bookEntry.imgID)
        }
    }
}

```

Figure 2: Screenshot of the adapter code

Part 2

Fragments vs Activities

Fragments are groups of views within an activity which can be reused in other places within the application. There can be multiple fragments in an activity that form the larger UI and each of these fragments have their own lifetime. The key difference between the two is that while activities can contain fragments, fragments cannot contain activities. As well as this, it is important to note that unlike activities which are slow to load, fragments are far faster to load which makes switching out small parts of the UI much better and faster than if done with just activities.

What is a FragmentManager and a fragment transaction

Fragment transactions are how we are able to add, replace, or remove fragments from an activity. The FragmentManager then allows us to handle these transactions.

How are intents used to transition between activities?

Intents are our way of stating what activity we wish to launch and what data we wish to send along with it. The way we do this is by constructing the intent by passing through the class that we wish to instantiate and then adding any of the extra data we wish to send to the new activity.