Technical Achievements

During the holidays I have spent around 50hours or more on the development and learning of an android booking system application. This application uses a REST api which I had to develop myself to gain an understanding of the android development practices. This app uses a main Drawer layout to allow the user to switch between pages when viewing information. For example they could be on the Initial check ins and check outs viewing page but wish to view information about today’s medical logs and so to do this they tap the hamburger menu in the top left of the page and then tap the page they wish to access. This uses fragments to change the current display within the main activity. For the Ins and outs page I used a view pager with Placeholder fragments to display the day by day data. Currently the way the view pager works is it loads the main page the user is going to be looking at, then It loads a page either side so that the swiping is smooth, this is the default setup for a view pager. However, you can expand the number of pages it loads each side with a method call when setting up the view pager. Within this view pager I use retrofit to make asynchronous calls to the API. To start with I make a call to the “/api/booking/read.php?indate=” endpoint, this will return me the bookings that have a check in date the same as the current date. Once the asynchronous call has been made I use method chaining to then make another asynchronous call to the “/api/booking/read.php?outdate=” endpoint. Once I have received all the data, I am able to place it within my recycler view using a external library called groupie. Groupie is externally developed recycler view adapter that allows the user to insert data items using sections and items. You can extend the classes that this library contains to make the headers and items display what you wish. In Java the groupie library uses data binding to bind your model object to the generated binding. Each item has a OnClickListener and OnLongClickListener assigned to it so that when the user either taps the object or tap and holds on it I can perform certain actions. For the OnClickListener I load a new activity that can display more in-depth data about the booking to the user. I can pass the current booking object to the next activity using intent, this is what I use to display the data from the page. On this page I dynamically load the animals in a Linear Layout, this is another content layout that allows the user to place views inside for them to be displayed. Adding to this layout dynamically in the java code allows me to insert all the animals that are associated with the booking even if they have different room allocations.