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**Computer Science 506**

**ToDoList Project write-up**

While working on ToDoList, I have faced a lot of debugging-need/error challenges, which have caused a lot of trouble in many different approaches I have used. This has required me to decide to restart the project many times with different approaches (I have attempted various tools, such as a Floating Action button, Checkboxes (interaction, placed separate from ListView), and many others). Instead of deleting code, I have decided to comment it, so my different attempts can be found in the project(commented out), in various classes and the xml file.

This Tuesday evening, I have decided to start fresh (after attempting to fix some bugs), and step through using the very useful youtube tutorial that I found online(<https://www.youtube.com/watch?v=ed967ZsQ19o>, and <https://www.youtube.com/watch?v=UnyKFgD7_yo&t=169s> ), showing how to implement it, step by step, using a button to add elements into the ListView. I have added a button that the user interacts with - it has an onClickListener set to it, and it uses an arrayAdapter to get the data from user input (a string). A user input is received by using an EditText. The second part of the tutorial shows how to remove items from the ListView. The method OnItemLongClickListener is used, and the specific item (by calling adapter.remove() method, and item is an integer of the specific item that was selected to delete, which can be accessed using a Sparse Boolean Array) is removed from the itemList ArrayList that contains the ListView items. I have taken the time to understand the process that was shown in the video; however, I was not sure why in my application, the checkbox was not able to be checked, and the application crashed (threw a Null Pointer exception) as soon as positionchecker.clear was called. If it were to work, the item that was checked on in the ListView should be deleted and the Toast message “Congratulations…” should pop up to the user.

Because of time constraints caused by starting over on Tuesday, I was not yet able to get to implementing the favorite button, but I understand that the “star” favorite button should work very similar to the checkbox button (can be implemented as two different boolean method conditions - if checked, and if not checked (the default condition)). If the favorite button is selected, it can be placed into a newly created ArrayList that appears above (when the user views it) in the ListView than the original ArrayList, making it show up at the top, prioritized. However, I was not sure if it is necessary to have two separate ListViews in the xml file to do that.