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**DEPARTMENT OF ELECTRICAL AND COMPUTER
ENGINEERING**



CSE 323 (Operating System)

Project Final Report

Section: 07

Project Title: Tuto File Manager Application

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INTRODUCTION:

For most users, the file system is the most visible aspect of a general-purpose operating system. It provides the mechanism for on-line storage of and access to both data and programs of the operating system and all the users of the computer system. The file system consists of two distinct parts: a collection of files, each storing related data, and a directory structure, which organizes and provides information about all the files in the system.

Here we tried to make a File Manager App based on file management system which will provide:

- Requesting and getting storage permission
- Listing files and folder in our app with recycler view
- It Will perform simple operations like opening, searching and deleting files etc.

OUR GOALS:

Our file manager has got the following goals:

- Help users to store their desired files
- Provide easy users access to their files
- To save time while accessing any information

ABOUT TUTO FILE MANAGER:

- ✓ APP NAME: TUTO File Manager
- ✓ SDK REQUIRED:
- ✓ API 23
- ✓ Android 6.0(Marshmallow)
- ✓ LANGUAGE USED: JAVA



APPLICATION FEATURES:

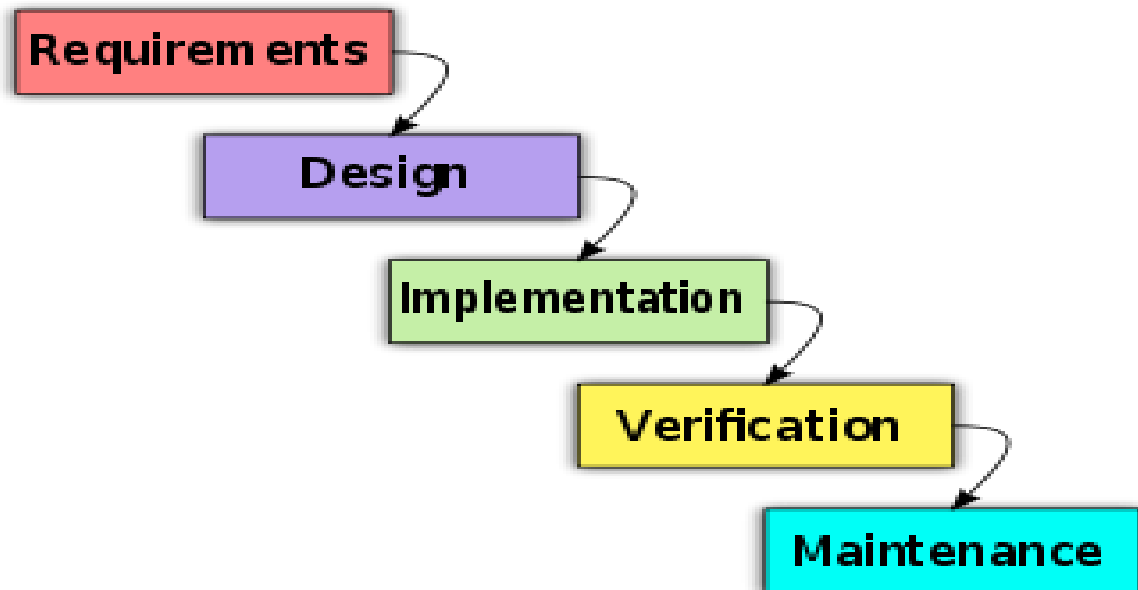
Our app has got the following features:

- ❖ **Request Storage Permission:** Here the App will ask the storage request permission from the user to access it.
- ❖ **List Files and Folders:** The app will list all the files and contain folders to respective extensions, example. .jpg, .png, .pdf.
- ❖ **Open Files on Click:** Files and folders will open by clicking or tapping on it.
- ❖ **Delete Operations:** This App will also perform delete operations on the system.
- ❖ **Move Operations:** This App will also perform move operations on the system.
- ❖ **Rename Operations:** User can also rename their files and folders by rename operations.

MODEL INTEGRATION:

The entire software development process is broken down into stages. The Waterfall approach is used to break down project operations into linear sequential phases, with each phase relying on the preceding phase to complete their work.

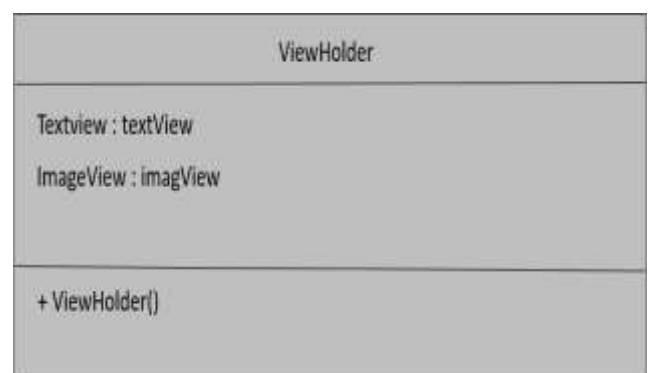
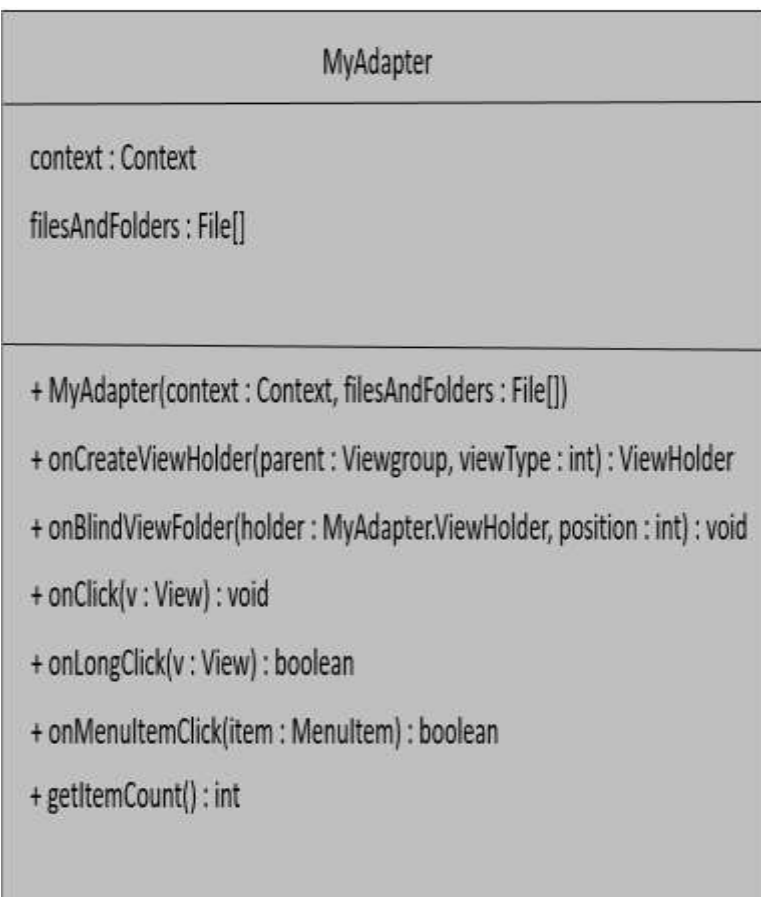
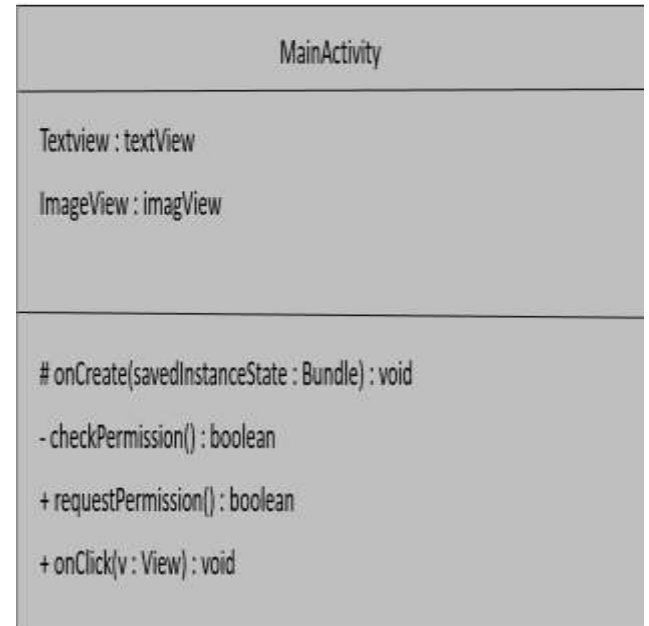
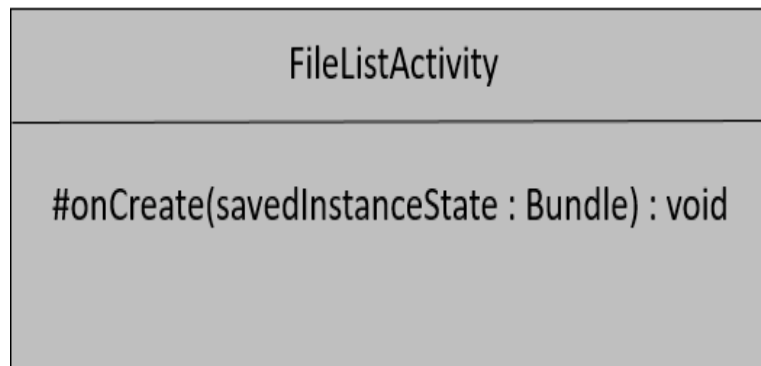
The procedure how we have integrated “Waterfall model” is described below with the phases.



- **Requirement Gathering and Analysis:** We collected all possible requirements of the system to be developed in this phase and documented in a requirement specification document.
- **System Design:** We studied the requirement specifications from first phase in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- **Implementation:** With inputs from the system design, the system was first developed in small programs called units, which are integrated in the next phase.
- **Verification:** All the units developed in the implementation phase were integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment and Maintenance:** Once the verification had done; the product was deployed.

UML DIAGRAMS:

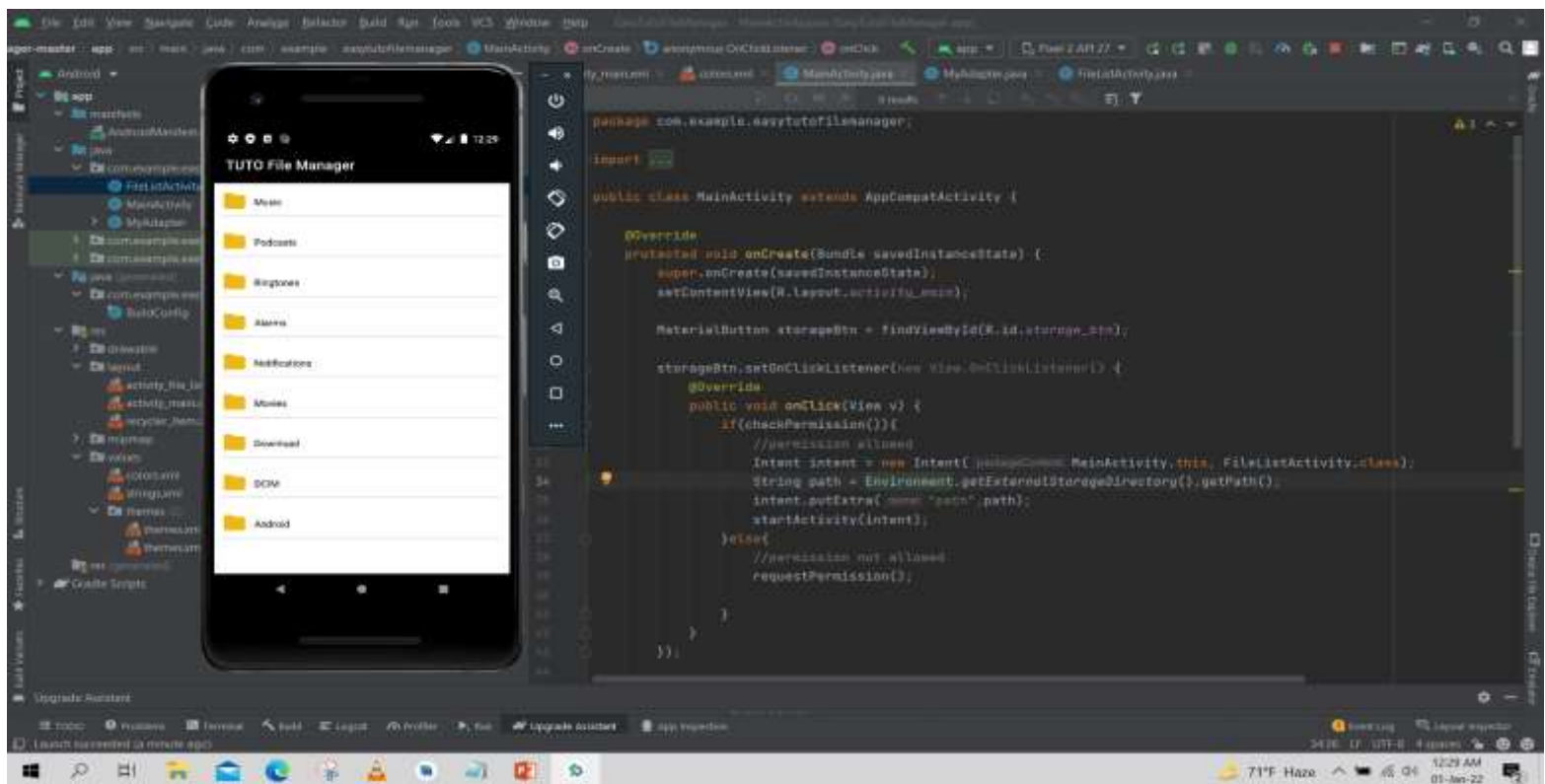
For implementing the project, these UML Diagrams are used.



CODE Implementations of the Project:

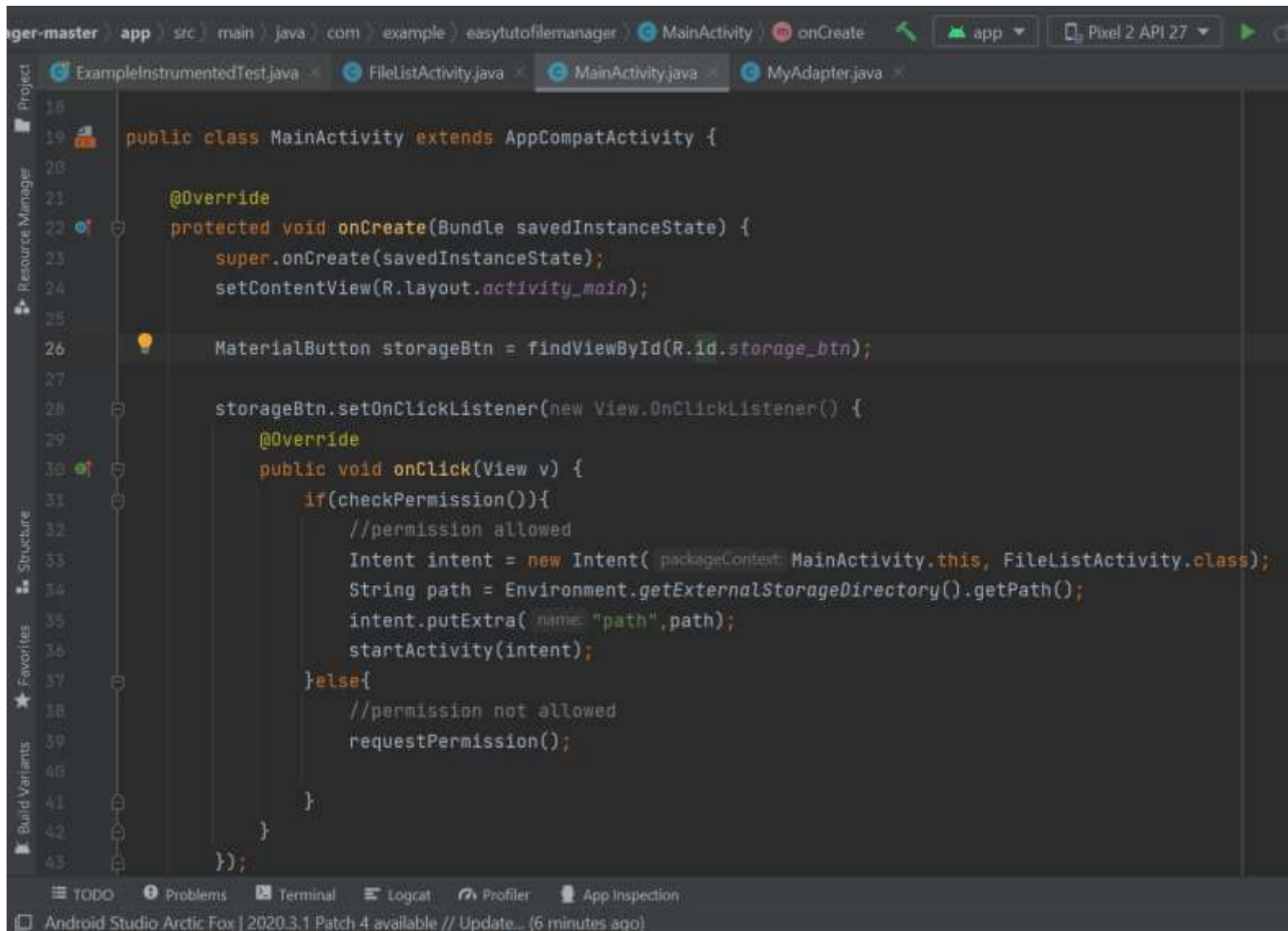
Here is some of the Code sample and screen shots of our projects

CODE SAMPLE 1:



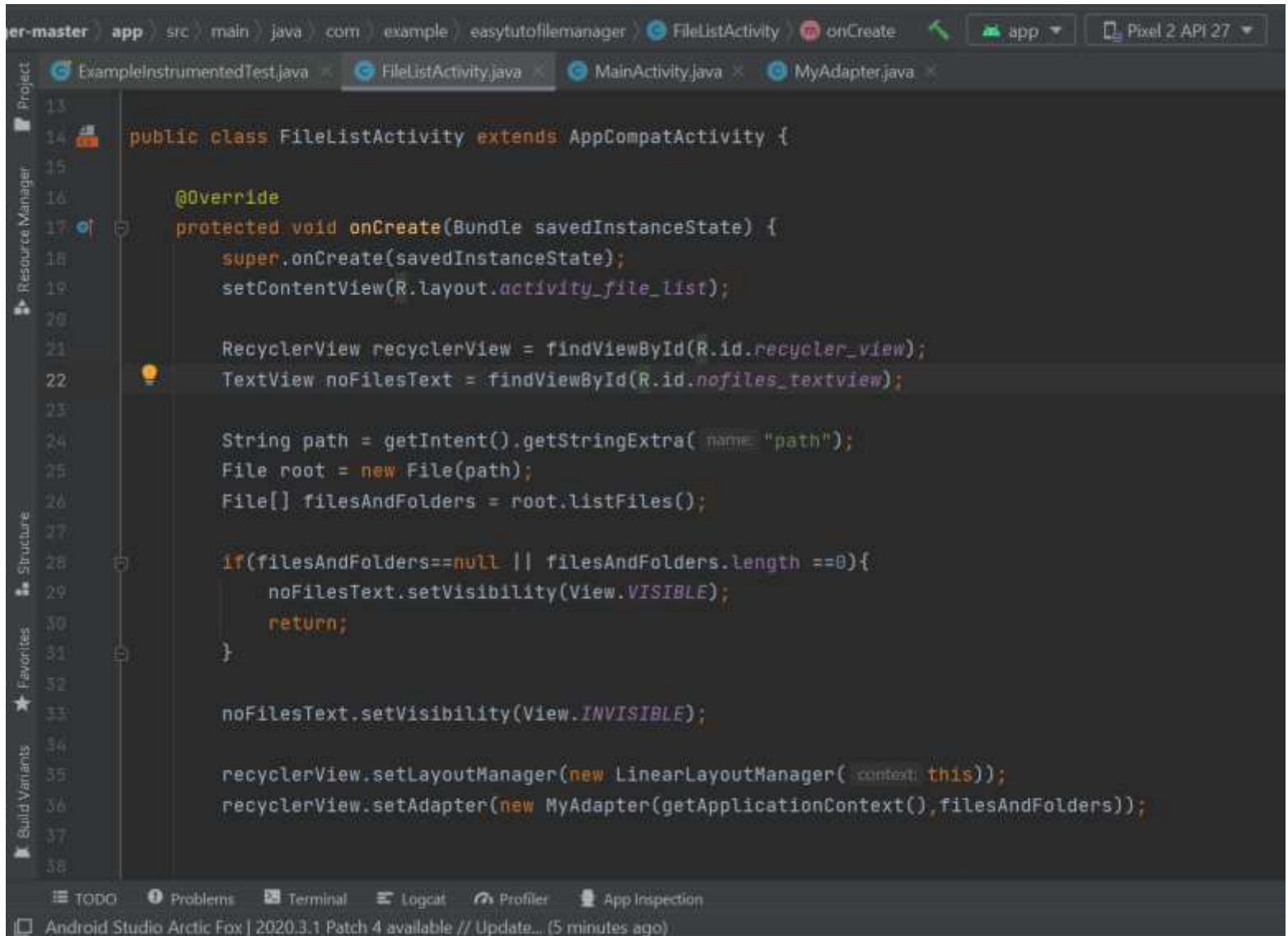
[Screen shot of opening the app though android studio]

CODE SAMPLE 2:



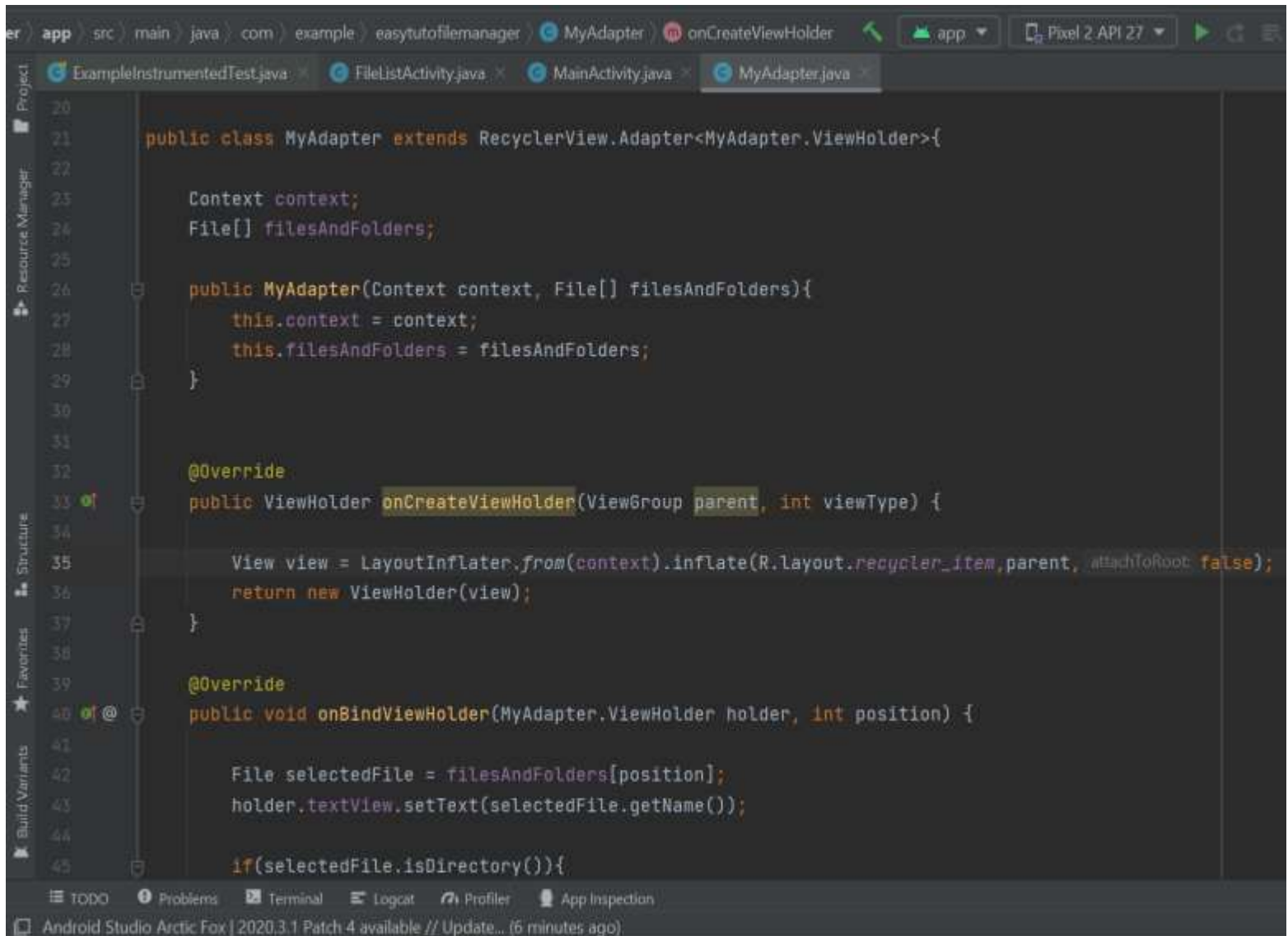
[Screen Shot of MyActivity.java]

CODE SAMPLE 3:



[Screen Shot of FileListActivity.java]

CODE SAMPLE: 4



[Screen Shot of MyAdapter.java]

APP EVALUATION CRITERIA:

Our app is evaluated under the following criterion:

- **Feasibility:** Our file manager app is quite easy to use and there are not much complexities in it. We tried to make it as simple as possible so that it may serve the basics.
- **Reliability:** Our app is totally reliable. All bugs that were initially detected and fixed accordingly. Since it's simple so there less complexities, bugs and errors.
- **Performance:** TUTO file manager is quite faster. It is also a very light file manager. It opens or search files without any lagging issues on the system.
- **Compatibility:** TUTO File manager is compatible with most of the android devices. Since android requirements is not that high. Over 90% android devises can easily run it.
- **Cost:** Our File Manager is totally free of cost anyone can use it. We hope it'll soon be available on Play store at free of charge. We have also plan to make it a open source application.

Conclusion:

Since in the era of 21 century, file manager is a part and parcel of our day-to-day life, we tried our best to build an efficient and handy file manager which would make people's work easier. We have also tried to make our simple, light, and free. We hope that our Tuto file manager will serve it's purpose expeditiously. And Our file manager will hopefully be liked by every user.