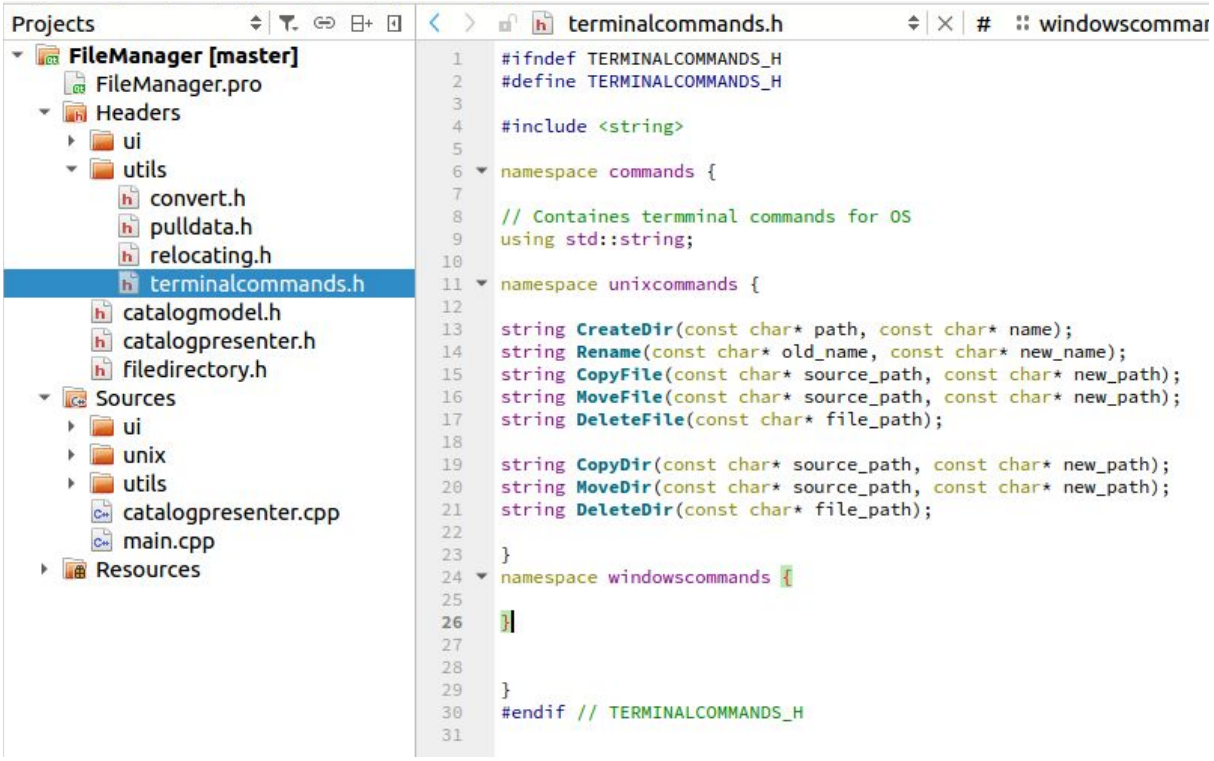
Question:
Hello, I'm not sure how to start my assignment and was hoping you could help.

Hi! I have written a step by step instruction how to begin to code any assignment.

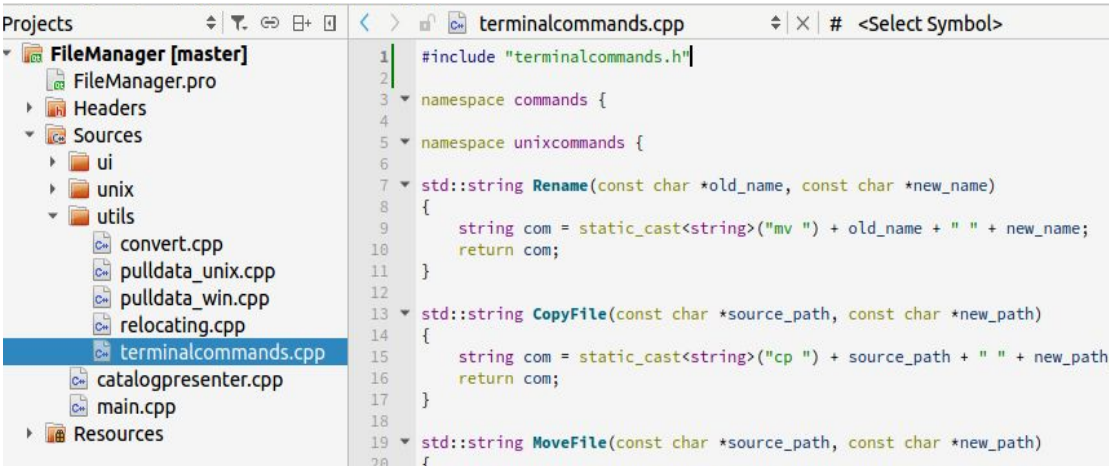
1. The first step is choosing a paradigm of programming that you will be using to develop your assignment. It is usually a *functional* or *OOP(Object oriented programming)* paradigms. This helps you to create a logic of you code and interaction with functions(i.e. events in functional programming) or entities(i.e. classes in OOP). Before all I recommend you to write a main functions/objects that your application should will contain. It helps you to begin with top abstraction level and move deeper to build logic relation between functions. You have to begin from most obvious functionalities.
    a. If you choose the first one(functional programming) you will:
        i. Create a *h-files(with .h extensions)* - the files which contains functions prototypes and all global variables. For good readability you have to contain all this to namespaces like in example:



Look, I have a file *terminalcommands.h* that provides a logic of system-based terminal commands. I created a namespace commands that includes *subnamespaces(unixcommand and windowscommands)* or some global variables or functions for all namespaces. You can have a lot *h-files* and their quantity depends on you logic-divided functionalities.

You can read more about .h-files here:
https://www.tutorialspoint.com/cprogramming/c_header_files.htm

ii. Then you must create *cpp-files(with .cpp extension) for every .h file*. The name of .cpp file must be the same of .h file. Don't forget to include you header file to .cpp.
Now you can define your functions that have been prototyped in header file and don't forget to follow your namespace hierarchy as same as header file. In picture example below I show how to do it:



iii. The next step will be to include you header files to main.cpp and use function from it.

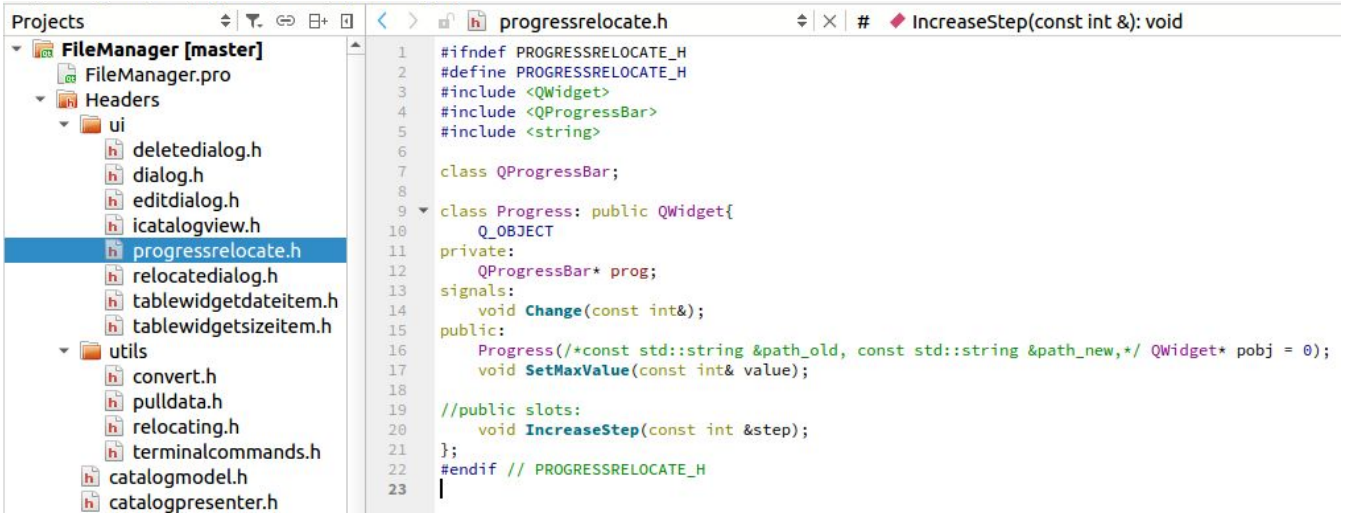
b. If you choose the second one(OOP programming) *you have to understand essence and concepts of this paradigm* and then you can begin:
   i. Firstly you have to *highlight your classes* and *think about functions they provides*.
   ii. You have to choose a design pattern that will provide a logic of interaction with classes.
   You can take a look about it here:
   https://sourcemaking.com/design_patterns
   If you not acquainted with patterns or you assignment is simple you can skip this step.
   iii. The next step is *creating a UML diagrams*(the most useful for me was *Use Case* and *Class or Object diagrams*) that help you understand a logic of interactions and to fix something easy in future.
   If you not acquainted with UML or you assignment is simple you can describe interactions in your notebook. Don't forget about

this step because it really helpful to develop faster and get a quality application.

Take a look about it here:
https://www.visual-paradigm.com/guide/uml-unified-modeling-language/uml-class-diagram-tutorial

iv. After all you can begin create you application:

1. Create a *h-files(with .h extensions)* - the files which contains *classes declarations* and all global variables like in example(don't pay attention to syntax, only to structure of code):



2. Then you must *create .cpp files for every .h file*. *The name of .cpp file must be the same of .h file*. Don't forget to include you header file to .cpp like in the first paragraph.
   Now you can define your functions inside that have been prototyped in classes in header file.
3. The next step will be to include you header files to main.cpp and create class instances and use it like in the first paragraph.

That's all! I hope it helps you to begin an assignment and make your code more readable.