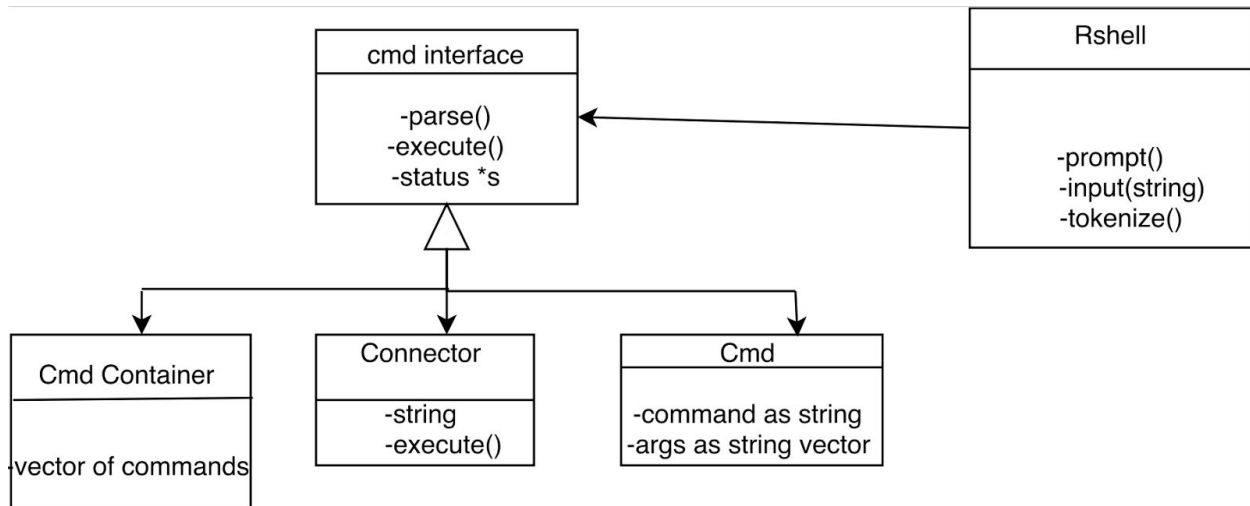Assignment 1: Design
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Introduction:

Our assignment takes a set of commands in a statement and executes it according to its operators. Our design has us implement a set of classes with child classes, to inherit functions that will be used to properly execute the correct sequences of commands inputted by the user. By reading user input in a specified order we are able to handle any combination of operators.

UML Diagram:

Classes/Class:

Class Rshell
- Display prompt
- Take input as string
- Tokenize input

Class Connector
- String

Class Cmd
- Command as string
- Args as string vector

Cmd Container
- Vector of command

Cmd interface
- Parse
- Execute
- Status *s

Coding Strategy:

We plan on creating an architecture of our code before implementing, then do a top-bottom approach, implementing each stage of our design. This will insure that our program runs at each stage without having to go back and make changes after we write the code.

Roadblocks:

A roadblock would be making sure that the fork() is used correctly, making sure the parent class isn't being executed before the child. We can overcome this problem by having a way to check the pid and making sure the we differentiate between the parent and child according to its pid.