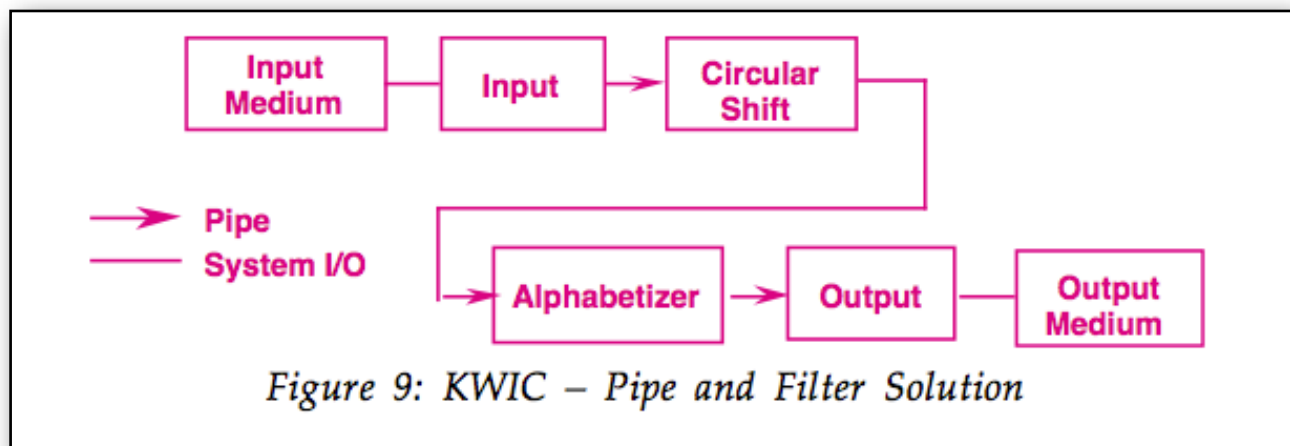
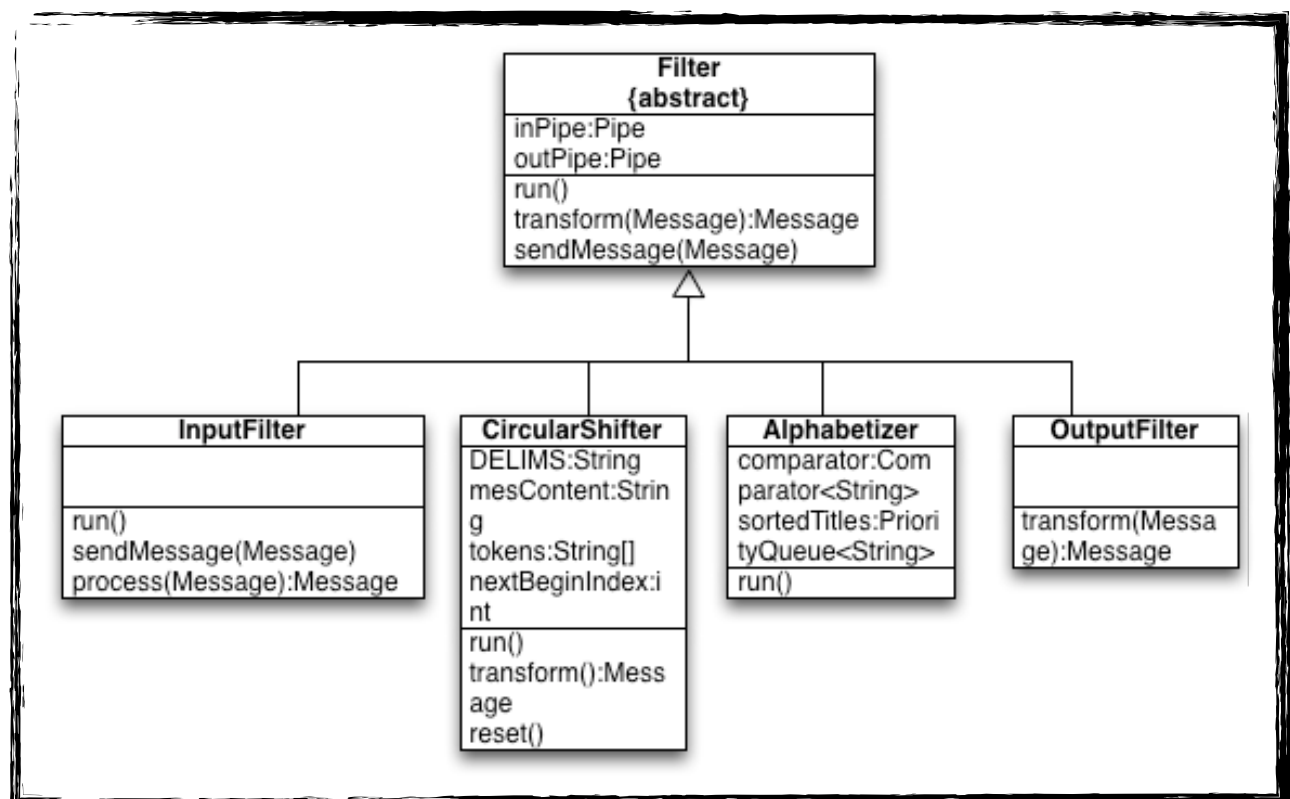


1, Design:

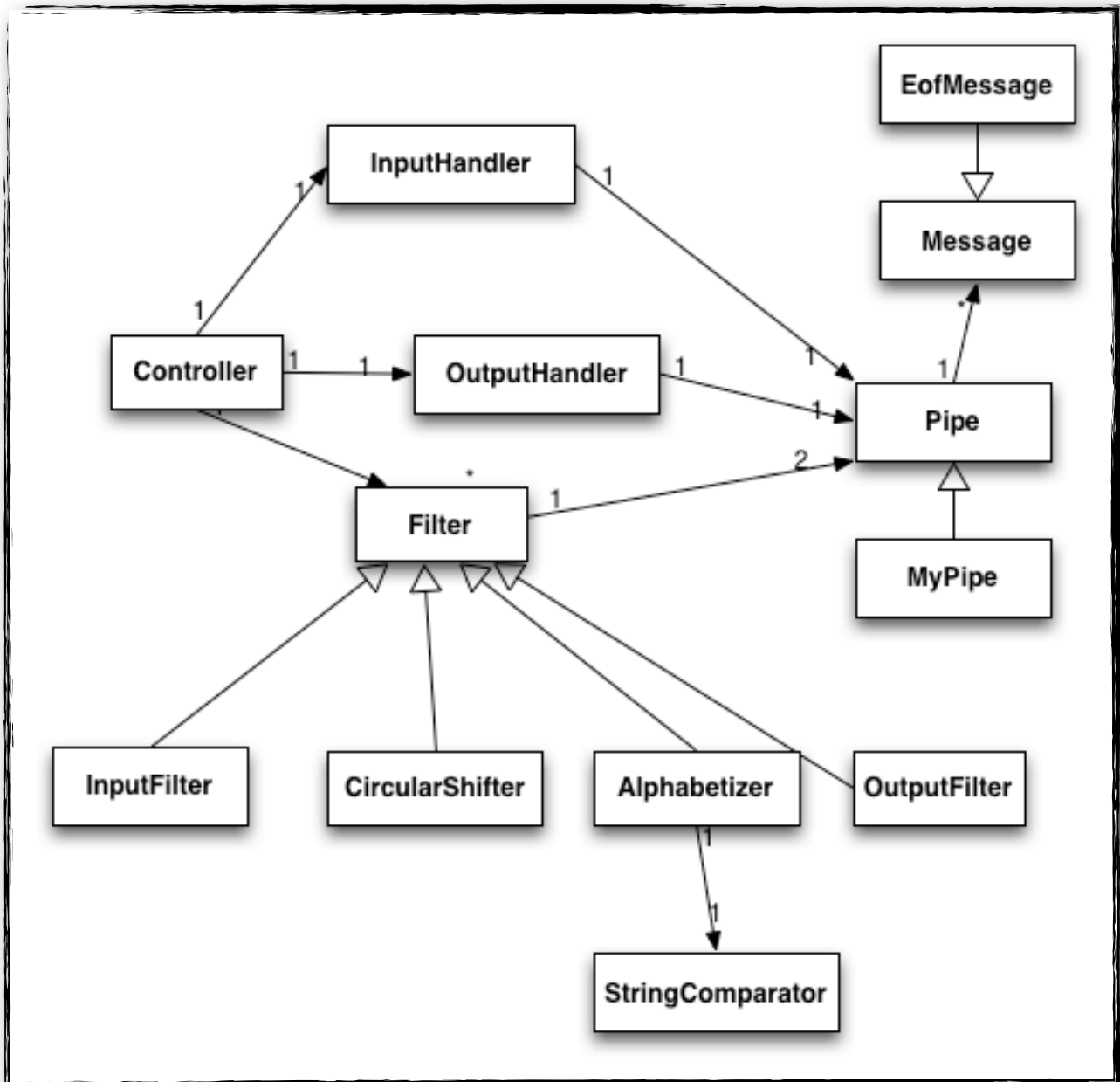
We chose this design(Figure 9) to implement.



UML Class Diagram for Filter:



## Module Dependency Diagram:



## 2, Distribution of work:

Name	Component
Hu Qiang	InputHandler, InputFilter, Pipe, Message
Jiao Jingping	Controller, Outputfilter, Outputmedium
Huynh Van Quang	Circular, Alphabetizer