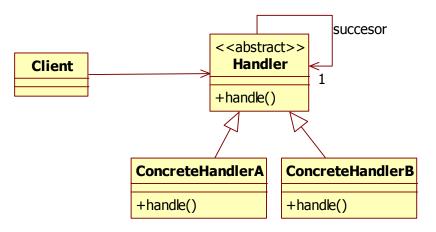
#### **Advanced Software Development DE**

### Midterm Exam May 18, 2013

#### Question 1 [ 15 points ] {15 minutes}

- a) With the Chain of Responsibility pattern a request is send to a chain of multiple handlers. The handlers themselves decide if they handle the particular request and if they pass the request to the next handler.
  - You use this pattern when a certain request should be handled by a certain handler class and you have more than one handler class. You need flexibility in the chain of handler classes.
- b) .



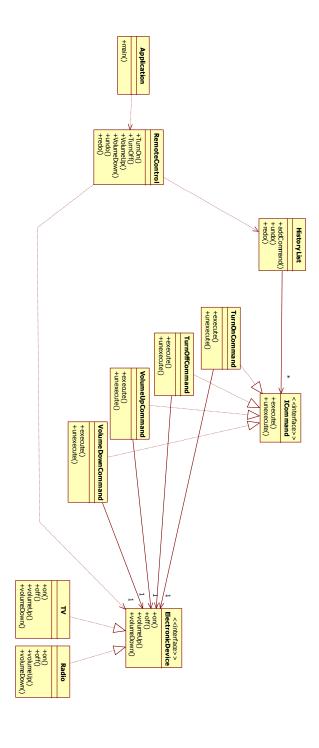
## Question 2 [ 10 points ] {15 minutes}

Suppose you have to design and implement a document editor like Microsoft Word. Explain for each of the following design patterns what problem this particular pattern can solve in a document editor like MS Word. Watch out, you have only 15 minutes for this question so your answer should be short and can be just 1 or 2 sentences.

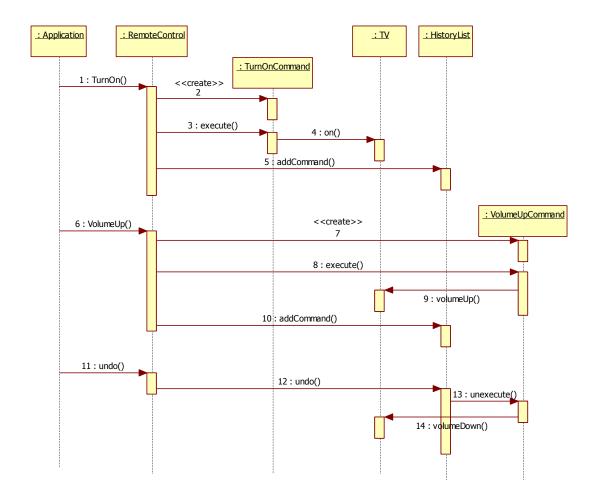
Pattern	Document editor problem that this pattern solves
Strategy	Different formatting algorithms
Iterator	Spell checking
Composite	Document structure
Command	Undo/redo functionality
Mediator	Mediate between the different buttons and menu items on the GUI
State	Different view states (1 page per screen, 2 pages per screen, full screen, web layout, etc)

# Question 3 [ 40 points ] {50 minutes}

a.



## b.



## Question 4 [ 30 points ] {40 minutes}

