CSE 443

Object Oriented

Analysis Design

MIDTERM

REPORT

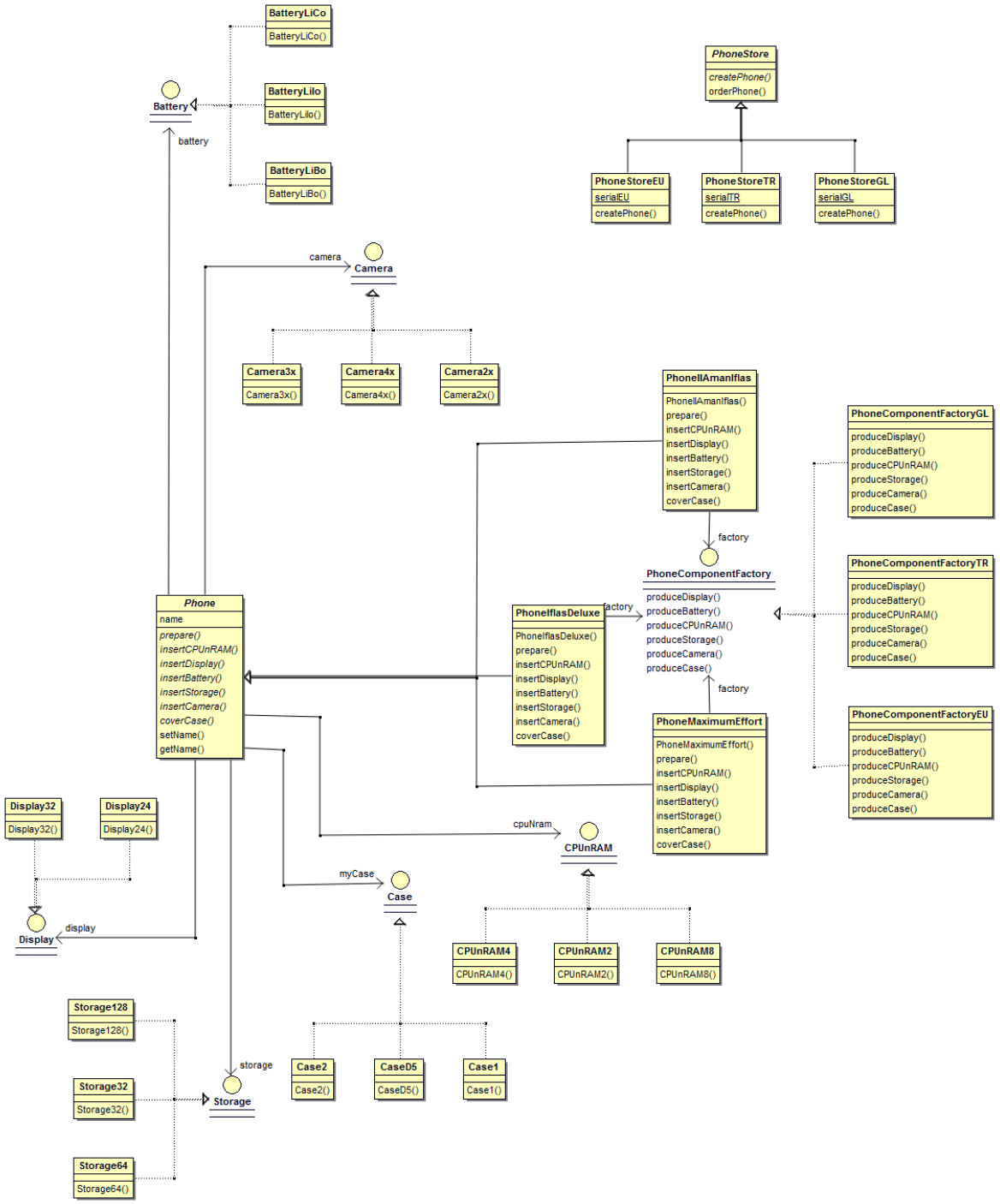
161044083

Galip Tayfun Saygılı

TA: Erchan Aptoula

Part 1

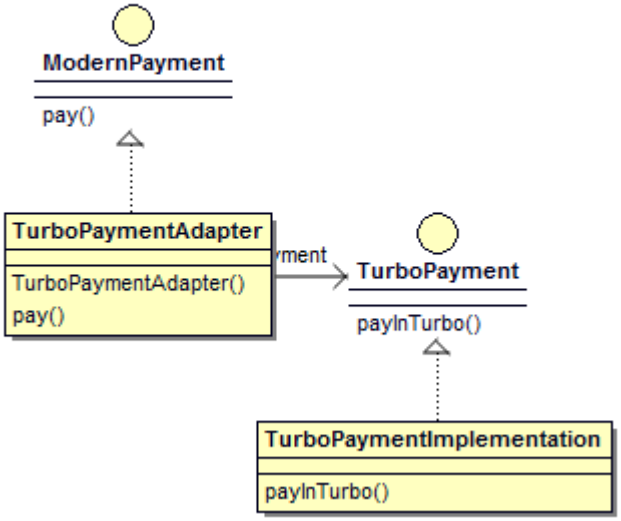
I designed this part with factory design pattern since it is very easy to modify behavior of a class, what components to use, factory of the components, modifying a basement of an order, etc. For instance, for a store, we may pick any components we need from the factory according to the requirements of an order. Or we may pick which distributor to collaborate with while constructing an object (we decide the behavior of an object during construction). Or we may change any phase of the production due to our needs independently from other factory classes.



UML Diagram of Part 1

Part 2

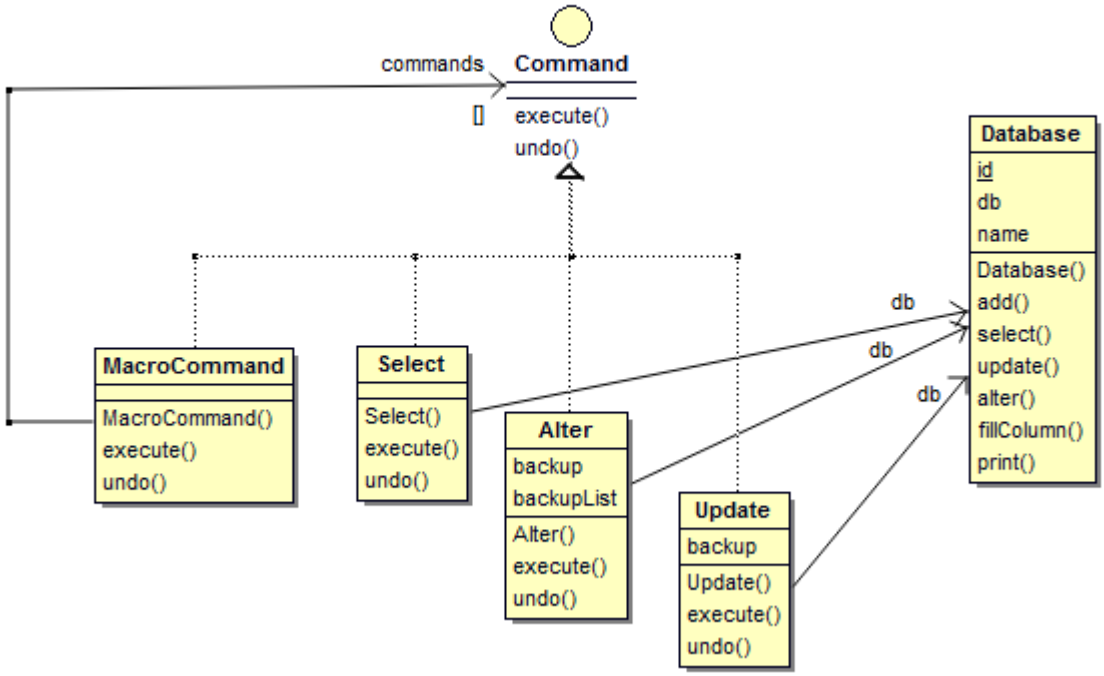
I designed the part with adapter design pattern, since we needed to adapt an old method to a new interface. With the help of composition, our class can directly wrap the old method, deliver the problem to the old, well working method and work on it.



UML Diagram of Part 2

Part 3

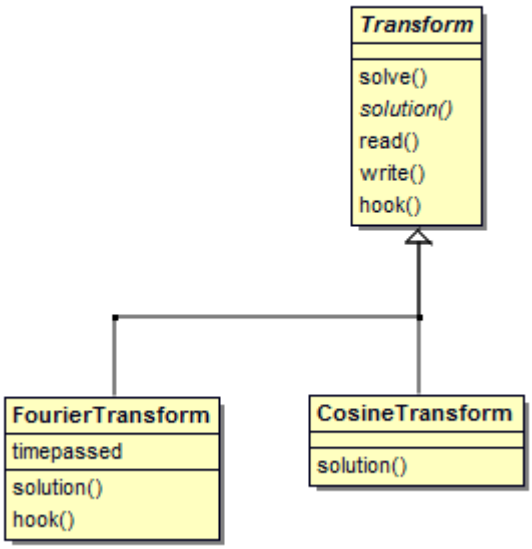
I designed this third part with command design pattern since we need to invoke different commands without knowing what the command is after setting them, or how it works and we are able to send any command from one center remotely. After setting the comands, what invoker only do is to deliver the command to the object and let it do the command, whenever it wants. We may also use a command set option for a specific job, each works after another.



UML Diagram of Part 3

Part 4

I designed the last part with template method pattern design because the solution methods that we designed has so many mutual operations. So that we may implement all of them mutually for both. And we may implement the rest seperately. This way, we take precaution against repeating the same code.



UML Diagram of Part 4