Design patterns

1. Factory:

Party class implements OperationFactory interface and has method createOperation()

package cz.cvut.fel.omo.api.impl

EcoSystem class implements PartyFactory interface and has method createParty()

package cz.cvut.fel.omo.api

2. Singleton:

EcoSystem is a Singleton, has method getInstance()

package cz.cvut.fel.omo.api

3. Composite:

Product class implements Reportable interface and keeps List<Reportable> myComponents as a field, so user can always look at report of product(all operation provided on it) and report of any component

package cz.cvut.fel.omo.api.product

4. Decorator:

5. Visitor:

OperationVisitor interface and its implementation class ReportVisitor. To visit different Operation classes and provide correct reports.

```
package cz.cvut.fel.omo.api
package cz.cvut.fel.omo.api.impl
```

6. Observer:

Observer and Subject interfaces which PartyImpl and ChannelImpl classes implement. It Helps Channel to notify all its participants when new Request created

```
package cz.cvut.fel.omo.api
package cz.cvut.fel.omo.api.impl
```

7. State:

State abstract class and its extended classes: Preparation, Waiting, Producing and End. These states has ProductionProcess class. Convenient way to implement production process.

package cz.cvut.fel.omo.production