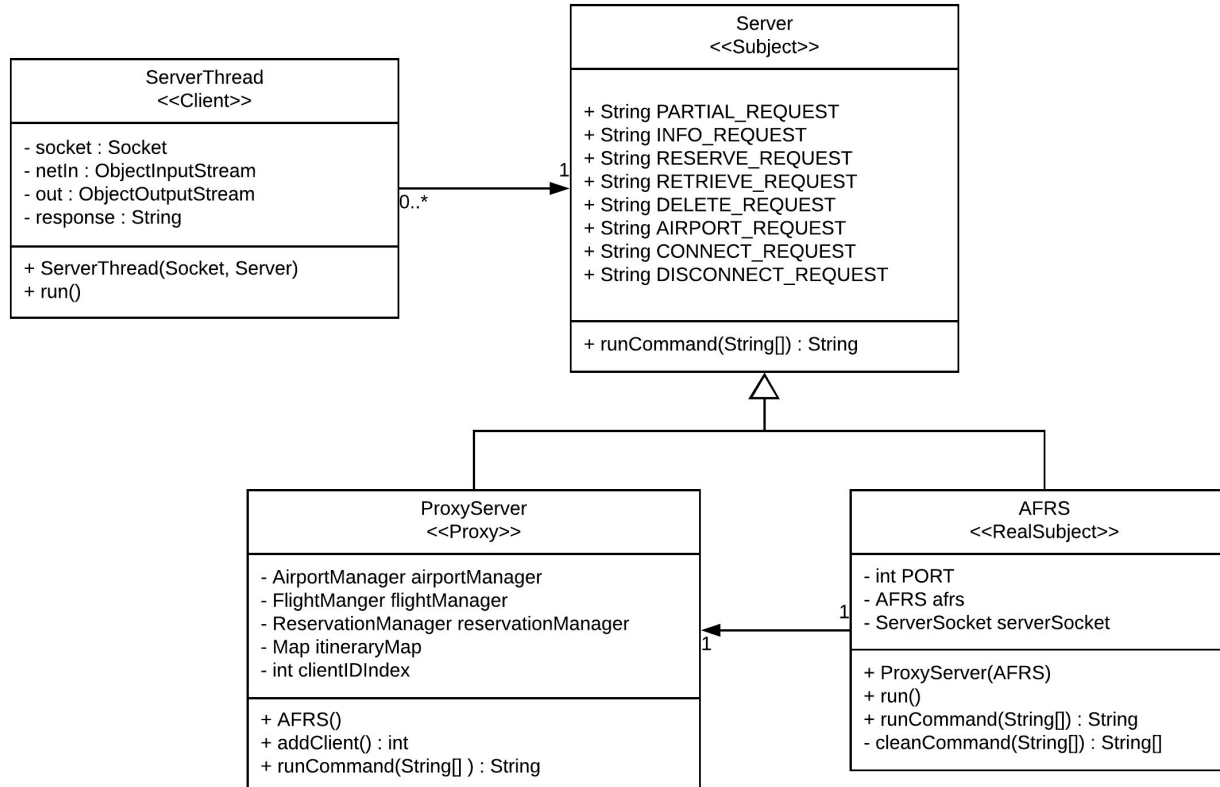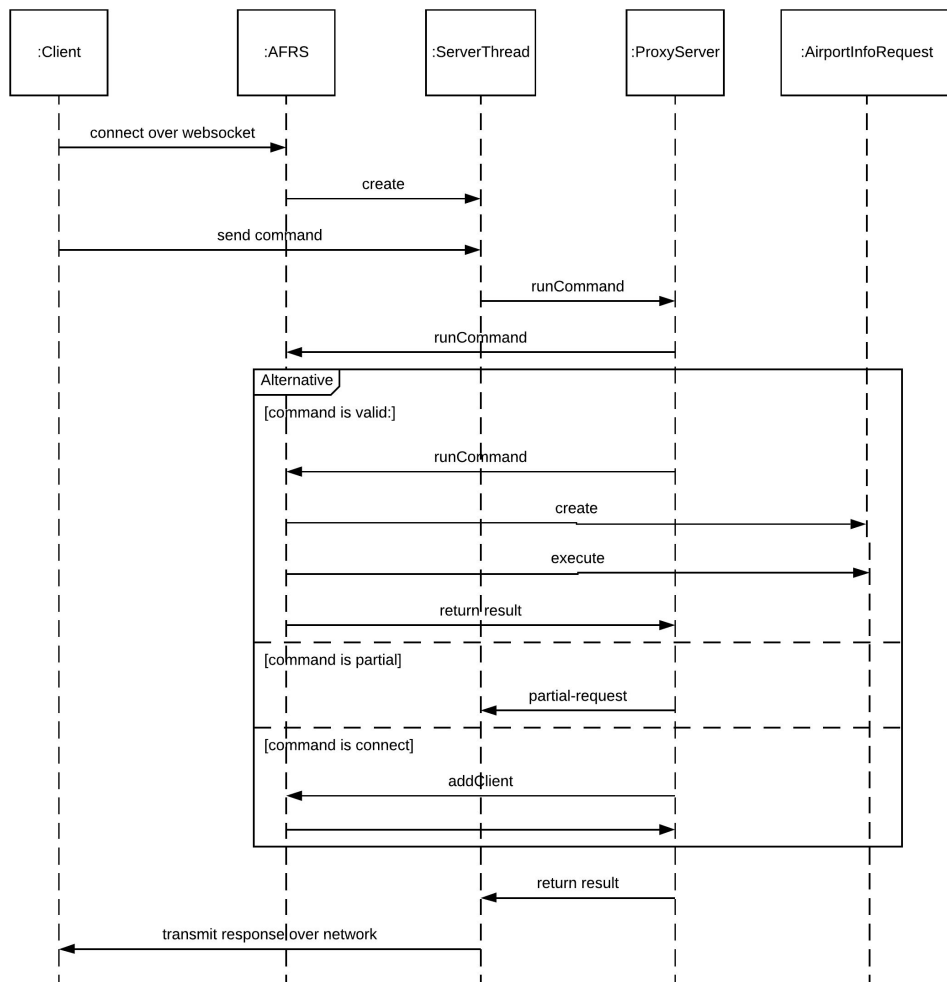# Release 2

Team 6

Networked Server

- Biggest design change in the system
- Made clients communicate with the server over a socket
- Easiest way to implement multiple clients
- Good place to use a protection proxy
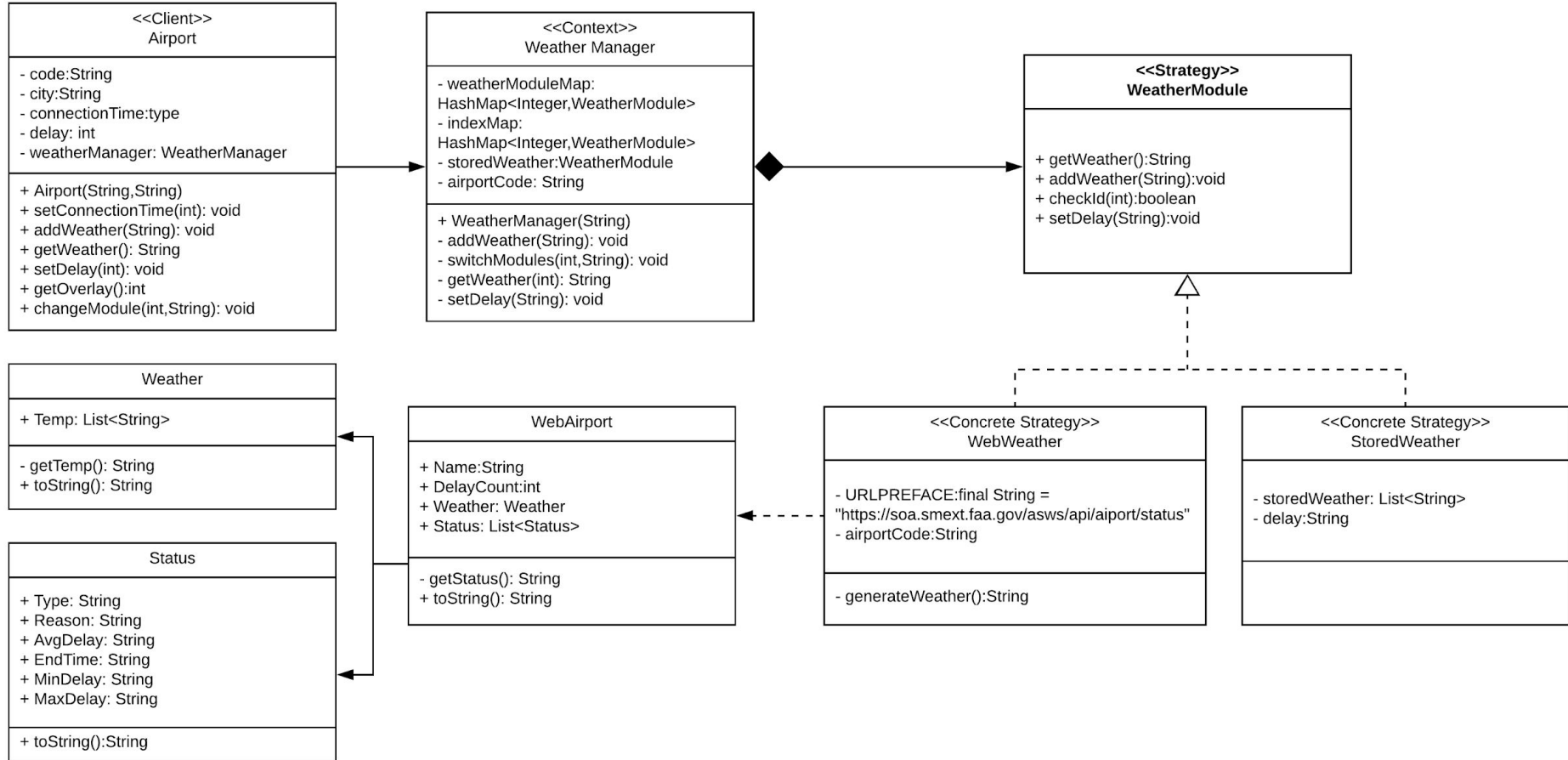- Helped to ensure single responsibility
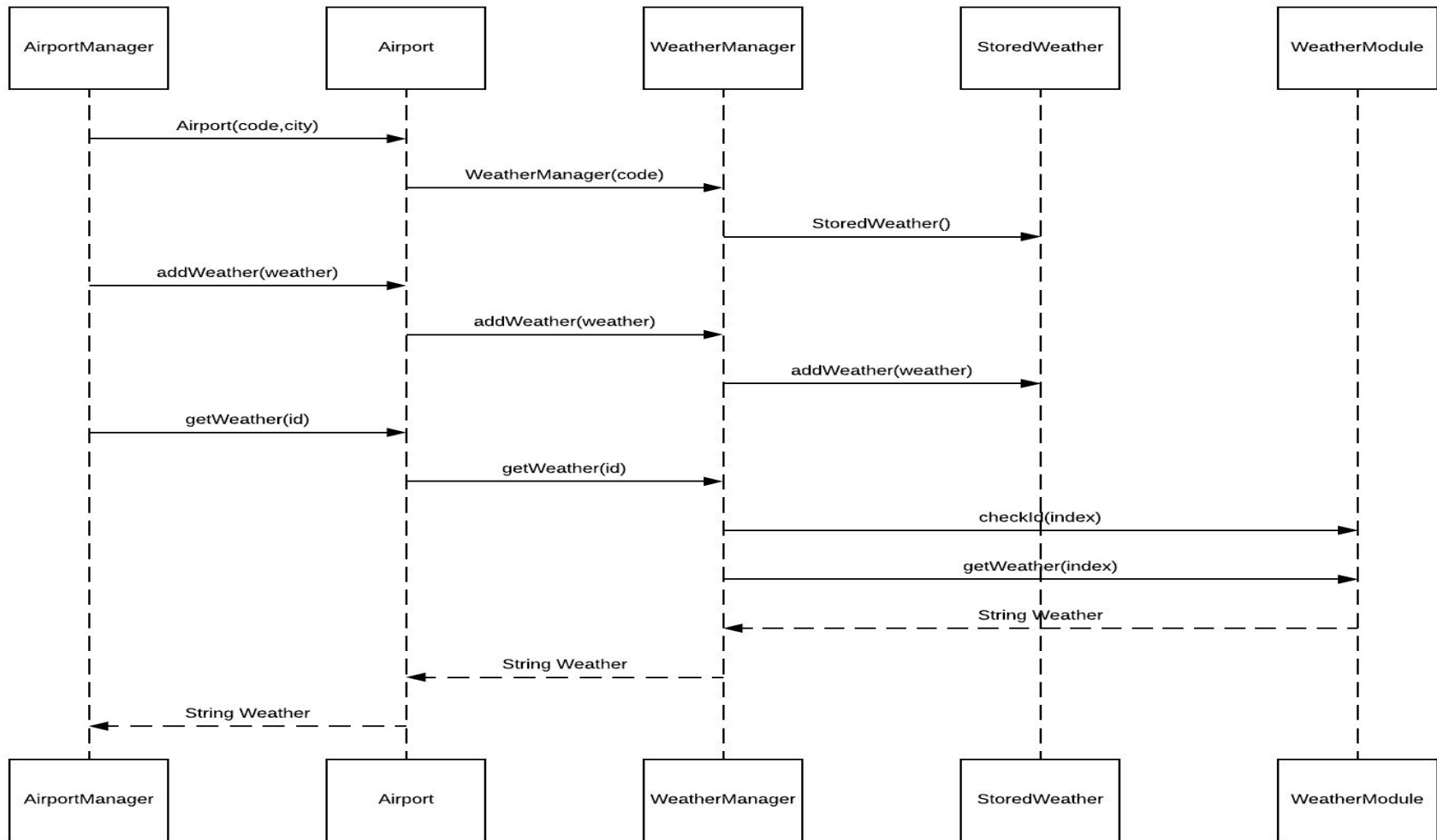
Networked Server

Networked Server

Web Services

<<Client>>
Airport

- code:String
- city:String
- connectionTime:type
- delay: int
- weatherManager: WeatherManager

+ Airport(String,String)
+ setConnectionTime(int): void
+ addWeather(String): void
+ getWeather(): String
+ setDelay(int): void
+ getOverlay():int
+ changeModule(int,String): void

<<Context>>
Weather Manager

- weatherModuleMap:
HashMap<Integer,WeatherModule>
- indexMap:
HashMap<Integer,WeatherModule>
- storedWeather:WeatherModule
- airportCode: String

+ WeatherManager(String)
- addWeather(String): void
- switchModules(int,String): void
- getWeather(int): String
- setDelay(String): void

<<Strategy>>
WeatherModule

+ getWeather():String
+ addWeather(String):void
+ checkId(int):boolean
+ setDelay(String):void

Weather

+ Temp: List<String>

- getTemp(): String
+ toString(): String

WebAirport

+ Name:String
+ DelayCount:int
+ Weather: Weather
+ Status: List<Status>

- getStatus(): String
+ toString(): String

<<Concrete Strategy>>
WebWeather

- URLPREFACE:final String =
"https://soa.smext.faa.gov/asws/api/aiport/status"
- airportCode:String

- generateWeather():String

<<Concrete Strategy>>
StoredWeather

- storedWeather: List<String>
- delay:String

Status

+ Type: String
+ Reason: String
+ AvgDelay: String
+ EndTime: String
+ MinDelay: String
+ MaxDelay: String

+ toString():String

Weather Services

- Used strategy to ease transition between local and FAA weather
    - Good fit because algorithms produced same result different ways.
    - Helped to follow liskov substitution principle.
    - Improved cohesion of system by dividing functionality into separate classes.

GUI

Airline Flight Reservation Server

Connect   Disconnect

Submit

Response:

```
connect,1
1,JFK,cloudy,85,30
1,info,20
1,94,1,105,SFO,6:00a,LAS,7:35a
2,94,1,106,SFO,7:20a,LAS,8:53a
3,114,1,133,SFO,8:00a,LAS,9:35a
4,106,1,130,SFO,9:00a,LAS,10:30a
5,152,1,243,SFO,9:50a,LAS,11:30a
```