University of Colombo School of Computing

Middleware Assignment

Mini Project

Group Members

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Middleware Assignment

Introduction to the establishing the middleware

We have implemented 3 servers called server A, server B and server C. There are two different client access ways; web app and desktop based app. We have defined four methods that clients can get the service from the servers. They are add, sub, mul, and div. Add and div methods belongs to server A, sub method belongs to sever B and mul method belongs to server C.

There are four ports to the whole system. The port called 9876 belongs to the middleware and it is on the middleware's client side. The other thee ports are 8881, 8882 and 8883 and they belong to server side and connect to A, server B and server C respectively.

The middleware that we have implemented has both client and server sides. The XML file in the middleware, helps to find the relevant server that the client's request should be passed.
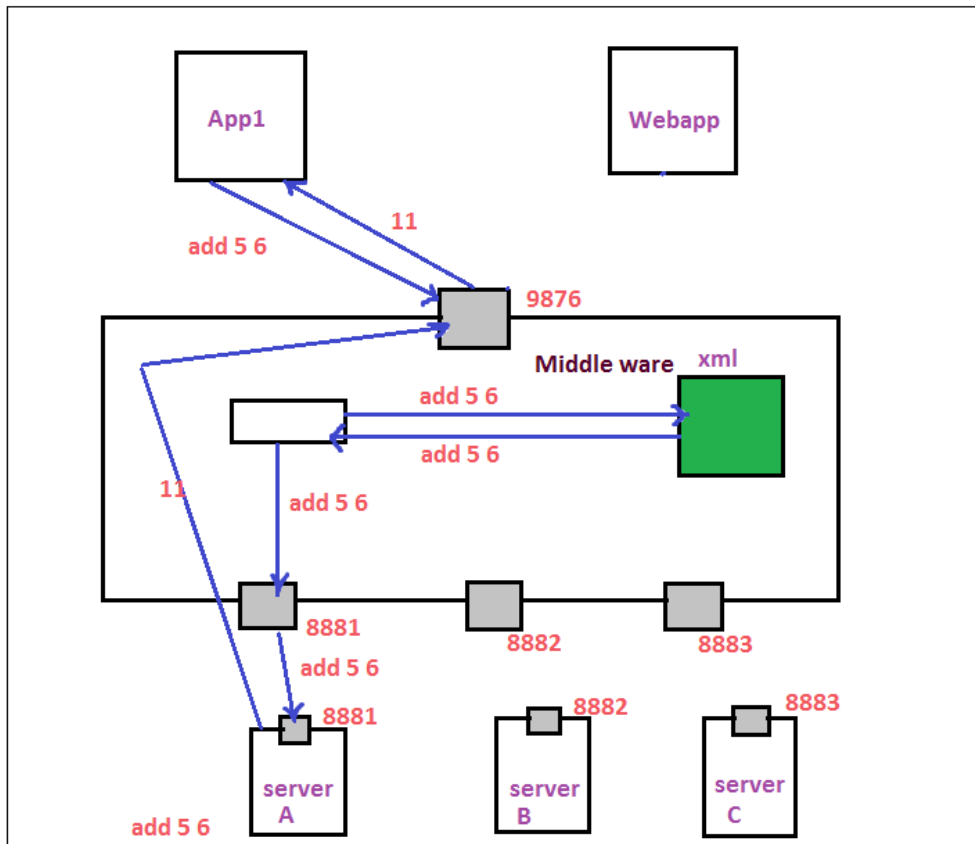
Guaranteeing Delivery of Messages

- Stream Data transfer
- Reliability
- Flow control
- Three way hand shake
- Synchronize communication

Service Discovery through a repository

The XML file is in the middleware and it contributes to find the relevant server that the client's request should be passed.

Marshalling

The below piece of code uses to do the marshalling.

```
public void WriteClient(String msg) {
    out.println(msg);
  }
```

Unmarshalling

The below piece of code uses to do the unmarshalling.

```
public String ReadClient() {
    try {
       String s = in.readLine();
       return s;
    } catch (IOException ex) {
       return "Error In reding";
    }
  }
```