

CS548-Assignment Eight

Changshuo Gao

1. Ping the service to test the REST Web service is properly set up

Command

```
curl -X GET -D patientSiteInfo_headers http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/patient/siteinfo
```

header file

```
HTTP/1.1 200 OK
X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle Corporation/1.7)
Server: GlassFish Server Open Source Edition 3.1.2
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Tue, 25 Nov 2014 03:27:23 GMT
```

2. Query a patient resource

Command

```
curl -X GET -D getPatient_headers http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/patient/1301
```

XML format

```
<patientRepresentation
  xmlns:ns2="http://cs548.stevens.edu/clinic/service/web/rest/data">
  <ns2:id>1301</ns2:id>
  <ns2:patient-id>1234</ns2:patient-id>
  <ns2:name>David</ns2:name>
  <ns2:dob>1989-01-01Z</ns2:dob>
  <ns2:age>25</ns2:age>
  <ns2:treatments
```

```
url="http://ec2-54-172-223-23.compute-
1.amazonaws.com:8080/ClinicRestWebService/resources/treatment/1303"
relation="http://cs548.stevens.edu/clinic/rest/relations/treatment"
mediaType="application/xml" />
</patientRepresentation>
```

Header file

HTTP/1.1 200 OK

X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle Corporation/1.7)

Server: GlassFish Server Open Source Edition 3.1.2

Content-Type: application/xml

Content-Length: 522

Date: Tue, 25 Nov 2014 03:27:47 GMT

3. Query a provider resource

Command

```
curl -X GET -D getProvider_headers http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/provider/ByNPI/9876
```

XML Format

```
<providerRepresentation
  xmlns:ns2="http://cs548.stevens.edu/clinic/service/web/rest/data">
  <ns2:id>1302</ns2:id>
  <ns2:npi>9876</ns2:npi>
  <ns2:name>Joe</ns2:name>
  <ns2:provider-type>Surgery</ns2:provider-type>
  <ns2:treatments
    url="http://ec2-54-172-223-23.compute-
1.amazonaws.com:8080/ClinicRestWebService/resources/treatment/1303"
    relation="http://cs548.stevens.edu/clinic/rest/relations/treatment"
    mediaType="application/xml" />
  </ns2:treatments>
</providerRepresentation>
```

Header File

HTTP/1.1 200 OK

X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle Corporation/1.7)

Server: GlassFish Server Open Source Edition 3.1.2

Content-Type: application/xml

Content-Length: 503

Date: Tue, 25 Nov 2014 03:28:17 GMT

4. Add a patient resource

Command

```
curl -X POST -D addPatient_headers -H "Content-type: application/xml" -d @new-patient.xml http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/patient
```

XML File

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <patientRepresentation
    xmlns:ns2="http://cs548.stevens.edu/clinic/service/web/rest/data">
    <ns2:patient-id>1235</ns2:patient-id>
    <ns2:name>Ken</ns2:name>
    <ns2:dob>1989-01-01</ns2:dob>
    <ns2:age>25</ns2:age>
  </patientRepresentation>
```

Header File

HTTP/1.1 201 Created
X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle Corporation/1.7)
Server: GlassFish Server Open Source Edition 3.1.2
Location: <http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/patient/1304>
Content-Length: 0
Date: Tue, 25 Nov 2014 03:29:22 GMT

5. Add a provider resource

Command

```
curl -X POST -D addProvider_headers -H "Content-type: application/xml" -d @new-provider.xml http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/provider
```

XML File

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
  <providerRepresentation
    xmlns:ns2="http://cs548.stevens.edu/clinic/service/web/rest/data">
    <ns2:npi>9875</ns2:npi>
    <ns2:name>Jerry</ns2:name>
    <ns2:provider-type>Surgery</ns2:provider-type>
  </providerRepresentation>
```

Header File

HTTP/1.1 201 Created
X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle Corporation/1.7)
Server: GlassFish Server Open Source Edition 3.1.2
Location: <http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/provider/1304>

1.amazonaws.com:8080/ClinicRestWebService/resources/provider/1305
Content-Length: 0
Date: Tue, 25 Nov 2014 03:29:59 GMT

6. Add a treatment resource

AddTreatment Function

```
@POST
@Consumes("application/xml")
public Response addTreatment(TreatmentRepresentation treatmentRep)
{
    try
    {
        int patDbIdIndex = treatmentRep.getPatient().getUrl().lastIndexOf('/') +
            1;
        long patKey = Long.parseLong(treatmentRep.getPatient().getUrl()
            .substring(patDbIdIndex));

        int provDbIdIndex = treatmentRep.getProvider().getUrl().lastIndexOf('/')
            + 1;
        long provKey = Long.parseLong(treatmentRep.getProvider().getUrl()
            .substring(provDbIdIndex));

        ObjectFactory factory = new ObjectFactory();
        TreatmentDto trmtDto = factory.createTreatmentDto();

        trmtDto.setDiagnosis(treatmentRep.getDiagnosis());

        if (treatmentRep.getDrugTreatment() != null)
        {
            DrugTreatmentType drug = factory.createDrugTreatmentType();
            drug.setName(treatmentRep.getDrugTreatment().getName());
            drug.setDosage(treatmentRep.getDrugTreatment().getDosage());
            trmtDto.setDrugTreatment(drug);
        }
        if (treatmentRep.getSurgery() != null)
        {
            SurgeryType surgery = factory.createSurgeryType();
            surgery.setDate(treatmentRep.getSurgery().getDate());
            trmtDto.setSurgery(surgery);
        }
        if (treatmentRep.getRadiology() != null)
        {
            RadiologyType radiology = factory.createRadiologyType();
            List<Date> dates = radiology.getDate();
            for (Date date : treatmentRep.getRadiology().getDate())
            {
                dates.add(date);
            }
        }
    }
}
```

```

        trmtDto.setRadiology(radiology);
    }

    long trmtKey = providerService.addTreatmentByDbId(patKey, provKey,
        trmtDto);

    UriBuilder ub = context.getAbsolutePathBuilder().path("{id}");
    URI url = ub.build(Long.toString(trmtKey));
    return Response.created(url).build();
}
catch (ProviderServiceExn e)
{
    throw new WebApplicationException();
}
}

```

Command

```

curl -X POST -D addTreatment_headers -H "Content-type: application/xml" -d @new-treatment.xml
http://ec2-54-172-223-23.compute-1.amazonaws.com:8080/ClinicRestWebService/resources/treatment

```

XML File

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<treatmentRepresentation
  xmlns:ns2="http://cs548.stevens.edu/clinic/service/web/rest/data">
  <ns2:patient
    url="http://http://ec2-54-172-223-23.compute-
1.amazonaws.com:8080/ClinicRestWebService/resources/patient/1301"
    relation="http://cs548.stevens.edu/clinic/rest/relations/patient"
    mediaType="application/xml" />

    <ns2:provider
      url="http://http://ec2-54-172-223-23.compute-
1.amazonaws.com:8080/ClinicRestWebService/resources/provider/1302"
      relation="http://cs548.stevens.edu/clinic/rest/relations/provider"
      mediaType="application/xml" />

    <ns2:diagnosis>fracture</ns2:diagnosis>
    <ns2:drug-treatment>
      <ns2:name>Pain Killer</ns2:name>
      <ns2:dosage>30.0</ns2:dosage>
    </ns2:drug-treatment>

  </treatmentRepresentation>

```

Header File

```

HTTP/1.1 201 Created
X-Powered-By: Servlet/3.0 JSP/2.2 (GlassFish Server Open Source Edition 3.1.2 Java/Oracle
Corporation/1.7)
Server: GlassFish Server Open Source Edition 3.1.2
Location: http://ec2-54-172-223-23.compute-
1.amazonaws.com:8080/ClinicRestWebService/resources/treatment/1306
Content-Length: 0
Date: Tue, 25 Nov 2014 03:31:28 GMT

```

