

Documento de Diseño

PeerCheck

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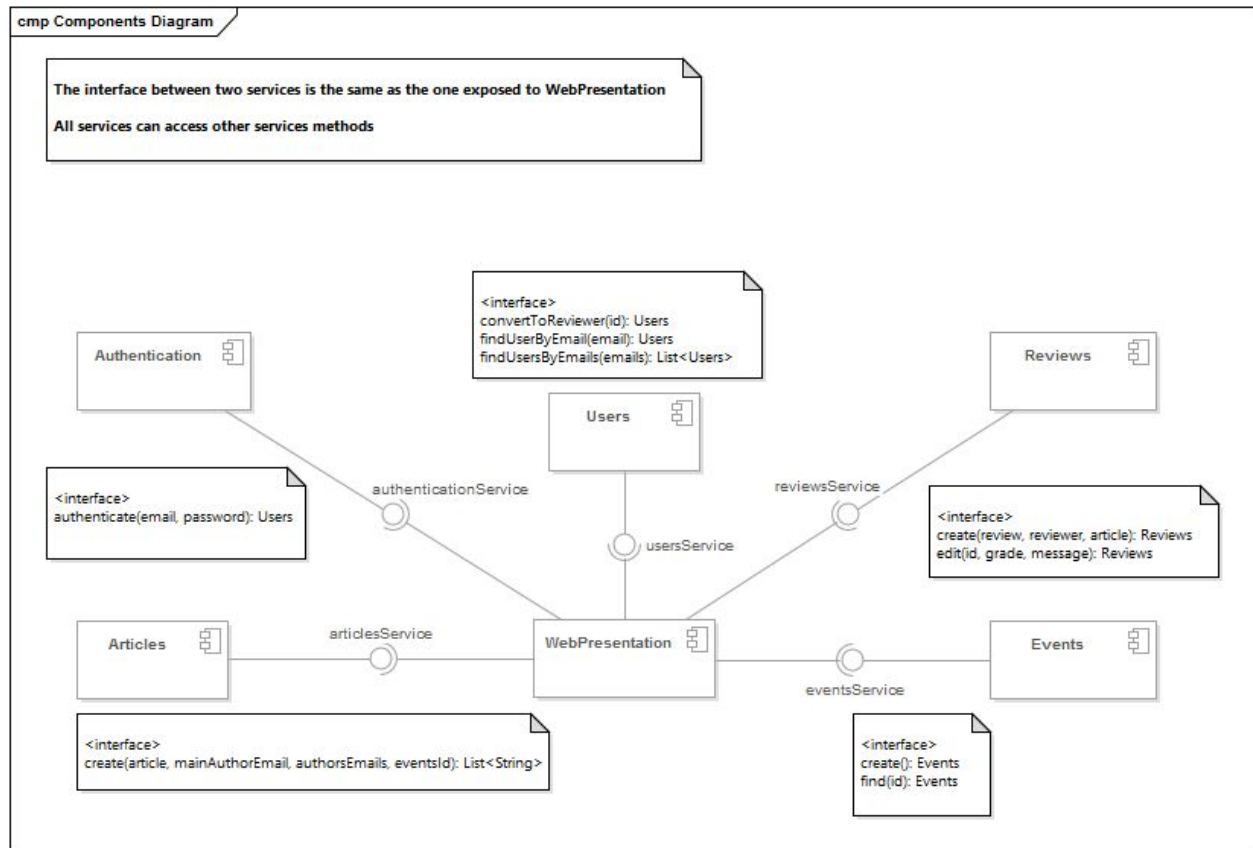
David Alonso Villamizar Lizcano

Web Services

2017

1. Arquitectura

1.1. Diagrama de componentes



Las interfaces entre dos servicios son las mismas que las expuestas al componente WebPresentation.

Todos los servicios pueden acceder a todos los métodos de los demás.

WebPresentation:

Componente principal relacionado con la interfaz gráfica, establece comunicación con todos los web services de PeerCheck.

Muestra las pantallas correspondientes para editores, revisores y autores.

Articles:

Define el servicio web utilizado para el manejo de artículos.

Expone la interfaz articlesService con el método:

- `create(article, mainAuthorEmail, authorsEmail, eventsId)`: Crea un artículo utilizando la entidad artículo (article), el correo correspondiente al autor principal (mainAuthorEmail),

los correos correspondientes a los autores colaboradores (authorsEmail) y los id de los eventos asociados.

Authentication:

Define el servicio web utilizado para el inicio de sesión.

Expone la interfaz authenticationService con el método:

- authenticate(email, password): Requiere el usuario registrado bajo el correo (email) y valida que la credencial (password) ingresada corresponda con la almacenada en el usuario.

Users:

Define el servicio web utilizado para la gestión de usuarios.

Expone la interfaz userService con los métodos:

- convertToReviewer(id): Edita el rol de un autor bajo el id (id) por el rol de revisor.
- findUserByEmail(email): Encuentra al usuario registrado bajo el correo (email).
- findUserByEmails(emails): Encuentra los usuarios registrados bajo los correos (emails).

Reviews:

Define el servicio web utilizado para el manejo de revisiones.

Expone la interfaz reviewsService con los métodos:

- create(review, reviewer, article): Crea una revisión utilizando la entidad revisión (review), el revisor encargado (reviewer), y el artículo correspondiente a la revisión (article).
- edit(id, grade, message): Asigna a la revisión bajo el id (id), la calificación (grade) con mensaje (message).

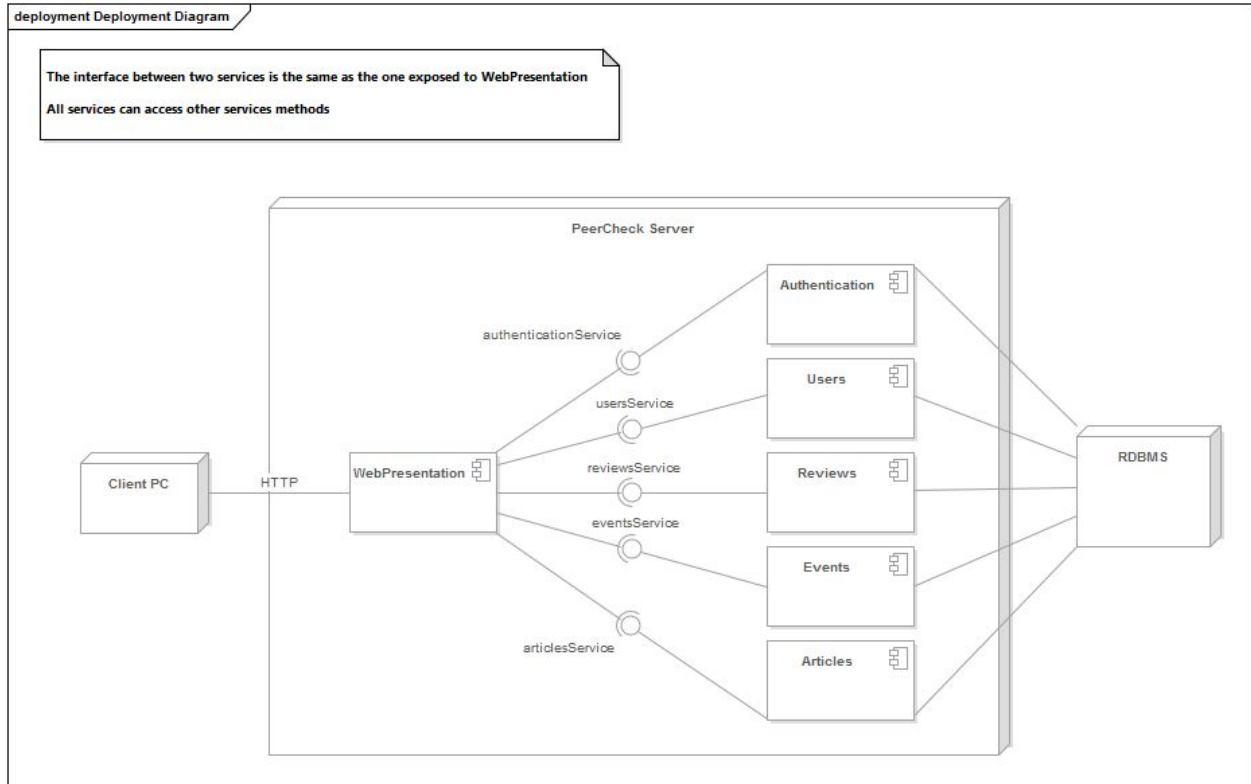
Events:

Define el servicio web utilizado para el manejo de eventos.

Expone la interfaz eventsService con los métodos:

- create(): Crea una evento.
- find(id): Encuentra un evento bajo el id (id).

1.2. Diagrama de despliegue



Las interfaces entre dos servicios son las mismas que las expuestas al componente WebPresentation.

Todos los servicios pueden acceder a todas las operaciones de los demás.

Client PC

Nodo del cliente en el que por medio del protocolo HTTP se comunica con el componente WebPresentation ubicado en PeerCheck Server, con el fin de mostrar la interfaz gráfica y utilizar los componentes de los servicios web asociados.

PeerCheck Server

Servidor compuesto por los componentes WebPresentation, Authentication, Users, Reviews, Events y Articles, encargado de ofrecer servicios web en uno o más nodos.

RDBMS

Relational DataBase Management System (RDBMS), con opciones de almacenamiento, acceso, actualización y eliminación de las entidades Articles, Events, Files, Reviews y Users.

2. Servicios

- **AuthenticationService**

- Esquema

```
<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><xs:schema xmlns:tns="http://services/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" targetNamespace="http://services/"

<xs:element name="authenticate" type="tns:authenticate"/>

<xs:element name="authenticateResponse" type="tns:authenticateResponse"/>

<xs:complexType name="authenticate">
<xs:sequence>
<xs:element name="email" type="xs:string" minOccurs="0"/>
<xs:element name="password" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="authenticateResponse">
<xs:sequence>
<xs:element name="return" type="tns:users" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="users">
<xs:sequence>
<xs:element name="birthdate" type="xs:dateTime" minOccurs="0"/>
<xs:element name="email" type="xs:string" minOccurs="0"/>
<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="name" type="xs:string" minOccurs="0"/>
<xs:element name="password" type="xs:string" minOccurs="0"/>
<xs:element name="role" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
</xs:schema>
```

- WSDL

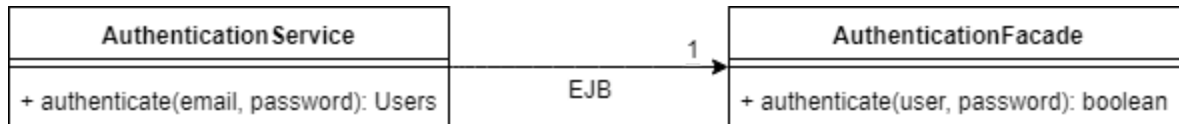
```
<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><!-- Generated by JAX-WS RI
(http://jax-ws.java.net). RI's version is Metro/2.3.2-b608 (trunk-7979;
2015-01-21T12:50:19+0000) JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12
```

```

JAXB-RI/2.2.12-b141219.1637 JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><definitions
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://www.w3.org/ns/ws-policy"
xmlns:wsp1_2="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://services/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://services/" name="AuthenticationService">
<types>
<xsd:schema>
<xsd:import namespace="http://services/"
schemaLocation="http://localhost:8080/AuthenticationService/AuthenticationService?xsd=1"/>
</xsd:schema>
</types>
<message name="authenticate">
<part name="parameters" element="tns:authenticate"/>
</message>
<message name="authenticateResponse">
<part name="parameters" element="tns:authenticateResponse"/>
</message>
<portType name="AuthenticationService">
<operation name="authenticate">
<input wsam:Action="http://services/AuthenticationService/authenticateRequest"
message="tns:authenticate"/>
<output wsam:Action="http://services/AuthenticationService/authenticateResponse"
message="tns:authenticateResponse"/>
</operation>
</portType>
<binding name="AuthenticationServicePortBinding" type="tns:AuthenticationService">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
<operation name="authenticate">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
</binding>
<service name="AuthenticationService">
<port name="AuthenticationServicePort" binding="tns:AuthenticationServicePortBinding">
<soap:address location="http://localhost:8080/AuthenticationService/AuthenticationService"/>
</port>
</service>
</definitions>

```

- Diseño



Servicio de autenticación AuthenticationService que por medio de un Enterprise Java Bean (EJB) consume el método provisto por la fachada de autenticación (AuthenticationFacade).

- **UserService**
 - Esquema

```

<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><xs:schema xmlns:tns="http://services/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" targetNamespace="http://services/"
  
```

```
<xs:element name="convertToReviewer" type="tns:convertToReviewer"/>
```

```
<xs:element name="convertToReviewerResponse" type="tns:convertToReviewerResponse"/>
```

```
<xs:element name="count" type="tns:count"/>
```

```
<xs:element name="countResponse" type="tns:countResponse"/>
```

```
<xs:element name="create" type="tns:create"/>
```

```
<xs:element name="edit" type="tns:edit"/>
```

```
<xs:element name="find" type="tns:find"/>
```

```
<xs:element name="findAll" type="tns:findAll"/>
```

```
<xs:element name="findAllResponse" type="tns:findAllResponse"/>
```

```
<xs:element name="findRange" type="tns:findRange"/>
```

```
<xs:element name="findRangeResponse" type="tns:findRangeResponse"/>
```

```
<xs:element name="findResponse" type="tns:findResponse"/>
```

```
<xs:element name="findUserByEmail" type="tns:findUserByEmail"/>
```

```
<xs:element name="findUserByEmailResponse" type="tns:findUserByEmailResponse"/>
```

```
<xs:element name="findUsersByEmails" type="tns:findUsersByEmails"/>
```

```
<xs:element name="findUsersByEmailsResponse" type="tns:findUsersByEmailsResponse"/>
```

```
<xs:element name="remove" type="tns:remove"/>

<xs:element name="users" type="tns:users"/>

<xs:complexType name="find">
  <xs:sequence>
    <xs:element name="id" type="xs:anyType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="findResponse">
  <xs:sequence>
    <xs:element name="return" type="tns:users" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="users">
  <xs:sequence>
    <xs:element name="birthdate" type="xs:dateTime" minOccurs="0"/>
    <xs:element name="email" type="xs:string" minOccurs="0"/>
    <xs:element name="id" type="xs:int" minOccurs="0"/>
    <xs:element name="name" type="xs:string" minOccurs="0"/>
    <xs:element name="password" type="xs:string" minOccurs="0"/>
    <xs:element name="role" type="xs:string" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="findRange">
  <xs:sequence>
    <xs:element name="range" type="xs:int" nillable="true" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="findRangeResponse">
  <xs:sequence>
    <xs:element name="return" type="tns:users" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="edit">
  <xs:sequence>
    <xs:element name="entity" type="tns:users" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="create">
  <xs:sequence>
    <xs:element name="entity" type="tns:users" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```



```
<xs:complexType name="count">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="countResponse">
<xs:sequence>
<xs:element name="return" type="xs:int"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="remove">
<xs:sequence>
<xs:element name="entity" type="tns:users" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findUsersByEmails">
<xs:sequence>
<xs:element name="emails" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findUsersByEmailsResponse">
<xs:sequence>
<xs:element name="return" type="tns:users" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findAll">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="findAllResponse">
<xs:sequence>
<xs:element name="return" type="tns:users" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="convertToReviewer">
<xs:sequence>
<xs:element name="id" type="xs:anyType" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="convertToReviewerResponse">
<xs:sequence>
<xs:element name="return" type="tns:users" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
```

```

<xs:complexType name="findUserByEmail">
<xs:sequence>
<xs:element name="email" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findUserByEmailResponse">
<xs:sequence>
<xs:element name="return" type="tns:users" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
</xs:schema>

```

- WSDL

```

<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
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JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><!-- Generated by JAX-WS RI
(http://jax-ws.java.net). RI's version is Metro/2.3.2-b608 (trunk-7979;
2015-01-21T12:50:19+0000) JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12
JAXB-RI/2.2.12-b141219.1637 JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><definitions
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://www.w3.org/ns/ws-policy"
xmlns:wsp1_2="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://services/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://services/" name="UsersService">
<types>
<xsd:schema>
<xsd:import namespace="http://services/"
schemaLocation="http://localhost:8080/UsersService/UsersService?xsd=1"/>
</xsd:schema>
</types>
<message name="remove">
<part name="parameters" element="tns:remove"/>
</message>
<message name="count">
<part name="parameters" element="tns:count"/>
</message>
<message name="countResponse">
<part name="parameters" element="tns:countResponse"/>
</message>
<message name="find">
<part name="parameters" element="tns:find"/>
</message>
<message name="findResponse">
<part name="parameters" element="tns:findResponse"/>

```

```

</message>
<message name="create">
<part name="parameters" element="tns:create"/>
</message>
<message name="findRange">
<part name="parameters" element="tns:findRange"/>
</message>
<message name="findRangeResponse">
<part name="parameters" element="tns:findRangeResponse"/>
</message>
<message name="edit">
<part name="parameters" element="tns:edit"/>
</message>
<message name="findAll">
<part name="parameters" element="tns:findAll"/>
</message>
<message name="findAllResponse">
<part name="parameters" element="tns:findAllResponse"/>
</message>
<message name="findUsersByEmails">
<part name="parameters" element="tns:findUsersByEmails"/>
</message>
<message name="findUsersByEmailsResponse">
<part name="parameters" element="tns:findUsersByEmailsResponse"/>
</message>
<message name="convertToReviewer">
<part name="parameters" element="tns:convertToReviewer"/>
</message>
<message name="convertToReviewerResponse">
<part name="parameters" element="tns:convertToReviewerResponse"/>
</message>
<message name="findUserByEmail">
<part name="parameters" element="tns:findUserByEmail"/>
</message>
<message name="findUserByEmailResponse">
<part name="parameters" element="tns:findUserByEmailResponse"/>
</message>
<portType name="UsersService">
<operation name="remove">
<input wsam:Action="http://services/UsersService/remove" message="tns:remove"/>
</operation>
<operation name="count">
<input wsam:Action="http://services/UsersService/countRequest" message="tns:count"/>
<output wsam:Action="http://services/UsersService/countResponse" message="tns:countResponse"/>
</operation>
<operation name="find">
<input wsam:Action="http://services/UsersService/findRequest" message="tns:find"/>
<output wsam:Action="http://services/UsersService/findResponse" message="tns:findResponse"/>
</operation>
<operation name="create">

```

```

<input wsam:Action="http://services/UsersService/create" message="tns:create"/>
</operation>
<operation name="findRange">
<input wsam:Action="http://services/UsersService/findRangeRequest" message="tns:findRange"/>
<output wsam:Action="http://services/UsersService/findRangeResponse"
message="tns:findRangeResponse"/>
</operation>
<operation name="edit">
<input wsam:Action="http://services/UsersService/edit" message="tns:edit"/>
</operation>
<operation name="findAll">
<input wsam:Action="http://services/UsersService/findAllRequest" message="tns:findAll"/>
<output wsam:Action="http://services/UsersService/findAllResponse"
message="tns:findAllResponse"/>
</operation>
<operation name="findUsersByEmails">
<input wsam:Action="http://services/UsersService/findUsersByEmailsRequest"
message="tns:findUsersByEmails"/>
<output wsam:Action="http://services/UsersService/findUsersByEmailsResponse"
message="tns:findUsersByEmailsResponse"/>
</operation>
<operation name="convertToReviewer">
<input wsam:Action="http://services/UsersService/convertToReviewerRequest"
message="tns:convertToReviewer"/>
<output wsam:Action="http://services/UsersService/convertToReviewerResponse"
message="tns:convertToReviewerResponse"/>
</operation>
<operation name="findUserByEmail">
<input wsam:Action="http://services/UsersService/findUserByEmailRequest"
message="tns:findUserByEmail"/>
<output wsam:Action="http://services/UsersService/findUserByEmailResponse"
message="tns:findUserByEmailResponse"/>
</operation>
</portType>
<binding name="UsersServicePortBinding" type="tns:UsersService">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
<operation name="remove">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="count">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>

```

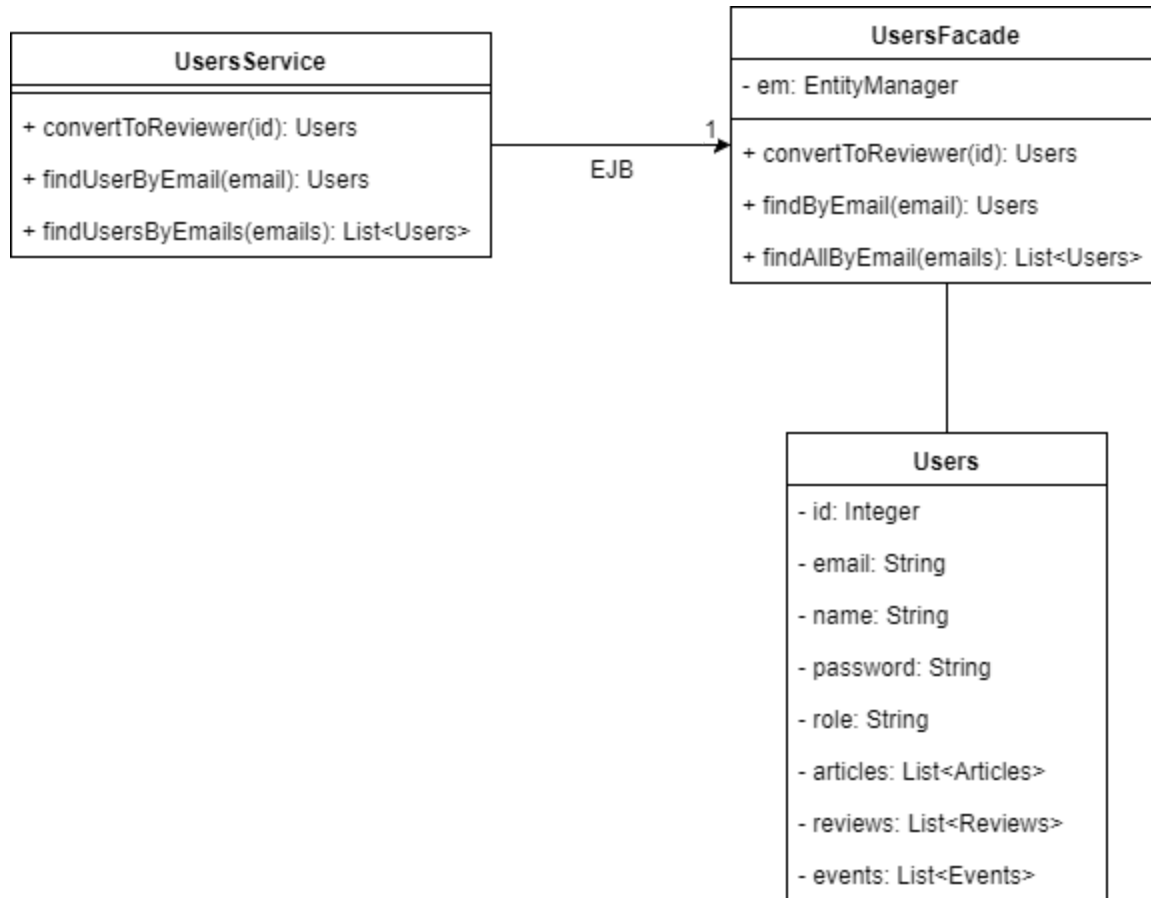
```
</operation>
<operation name="find">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
  <output>
    <soap:body use="literal"/>
  </output>
</operation>
<operation name="create">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
</operation>
<operation name="findRange">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
  <output>
    <soap:body use="literal"/>
  </output>
</operation>
<operation name="edit">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
</operation>
<operation name="findAll">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
  <output>
    <soap:body use="literal"/>
  </output>
</operation>
<operation name="findUsersByEmails">
  <soap:operation soapAction=""/>
  <input>
    <soap:body use="literal"/>
  </input>
  <output>
    <soap:body use="literal"/>
  </output>
</operation>
<operation name="convertToReviewer">
```

```

<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="findUserByEmail">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
</binding>
<service name="UsersService">
<port name="UsersServicePort" binding="tns:UsersServicePortBinding">
<soap:address location="http://localhost:8080/UsersService/UsersService"/>
</port>
</service>
</definitions>

```

- Diseño



Servicio de usuarios **UserService** que por medio de un Enterprise Java Bean consume los métodos provistos por la fachada de usuarios (**UsersFacade**), utilizando la entidad de usuarios (**Users**).

La entidad **Users** contiene:

- **id**: identificador único.
- **email**: correo electrónico de la persona.
- **name**: nombre de la persona.
- **password**: contraseña de la cuenta.
- **role**: rol de la persona en la plataforma (autor, revisor o editor).
- **articles**: artículos realizados por el usuario.
- **reviews**: revisiones asociadas a los artículos del usuario.
- **events**: eventos en los que el usuario ha participado.

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAll xmlns:ns2="http://services/" />
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAllResponse xmlns:ns2="http://services/">
      <return>
        <birthdate>2017-10-14T00:00:00-05:00</birthdate>
        <email>editor@mail.com</email>
        <id>1</id>
        <name>Editor</name>
        <password>editor</password>
        <role>Editor</role>
      </return>
      <return>
        <birthdate>2017-10-14T00:00:00-05:00</birthdate>
        <email>autor1@mail.com</email>
        <id>2</id>
        <name>Autor</name>
        <password>autor</password>
        <role>Author</role>
      </return>
    </ns2:findAllResponse>
  </S:Body>
</S:Envelope>
```

- **ArticlesService**
 - Esquema

```
<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><xs:schema xmlns:tns="http://services/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" targetNamespace="http://services/">
```

```
<xs:element name="articles" type="tns:articles"/>
```

```
<xs:element name="count" type="tns:count"/>
```

```
<xs:element name="countResponse" type="tns:countResponse"/>
```

```
<xs:element name="create" type="tns:create"/>
```

```
<xs:element name="create_1" type="tns:create_1"/>
```

```
<xs:element name="create_1Response" type="tns:create_1Response"/>
```

```
<xs:element name="edit" type="tns:edit"/>
```

```
<xs:element name="find" type="tns:find"/>
```

```
<xs:element name="findAll" type="tns:findAll"/>
```

```
<xs:element name="findAllResponse" type="tns:findAllResponse"/>
```



```
<xs:element name="findRange" type="tns:findRange"/>

<xs:element name="findRangeResponse" type="tns:findRangeResponse"/>

<xs:element name="findResponse" type="tns:findResponse"/>

<xs:element name="remove" type="tns:remove"/>

<xs:element name="users" type="tns:users"/>

<xs:complexType name="count">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="countResponse">
<xs:sequence>
<xs:element name="return" type="xs:int"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="create_1">
<xs:sequence>
<xs:element name="article" type="tns:articles" minOccurs="0"/>
<xs:element name="mainAuthorEmail" type="xs:string" minOccurs="0"/>
<xs:element name="authorsEmails" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
<xs:element name="eventsIds" type="xs:int" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="articles">
<xs:sequence>
<xs:element name="abstract1" type="xs:string" minOccurs="0"/>
<xs:element name="category" type="xs:string" minOccurs="0"/>
<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="keywords" type="xs:string" minOccurs="0"/>
<xs:element name="mainAuthorId" type="tns:users" minOccurs="0"/>
<xs:element name="title" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="users">
<xs:sequence>
<xs:element name="birthdate" type="xs:dateTime" minOccurs="0"/>
<xs:element name="email" type="xs:string" minOccurs="0"/>
<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="name" type="xs:string" minOccurs="0"/>
<xs:element name="password" type="xs:string" minOccurs="0"/>
<xs:element name="role" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
```

```
<xs:complexType name="create_1Response">
<xs:sequence>
<xs:element name="return" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="create">
<xs:sequence>
<xs:element name="entity" type="tns:articles" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findAll">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="findAllResponse">
<xs:sequence>
<xs:element name="return" type="tns:articles" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="remove">
<xs:sequence>
<xs:element name="entity" type="tns:articles" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="edit">
<xs:sequence>
<xs:element name="entity" type="tns:articles" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="find">
<xs:sequence>
<xs:element name="id" type="xs:anyType" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findResponse">
<xs:sequence>
<xs:element name="return" type="tns:articles" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findRange">
<xs:sequence>
<xs:element name="range" type="xs:int" nillable="true" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
```

```

</xs:sequence>
</xs:complexType>

<xs:complexType name="findRangeResponse">
<xs:sequence>
<xs:element name="return" type="tns:articles" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
</xs:schema>

```

○ WSDL

```

<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><!-- Generated by JAX-WS RI
(http://jax-ws.java.net). RI's version is Metro/2.3.2-b608 (trunk-7979;
2015-01-21T12:50:19+0000) JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12
JAXB-RI/2.2.12-b141219.1637 JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><definitions
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://www.w3.org/ns/ws-policy"
xmlns:wsp1_2="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://services/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://services/" name="ArticlesService">
<types>
<xsd:schema>
<xsd:import namespace="http://services/"
schemaLocation="http://localhost:8080/ArticlesService/ArticlesService?xsd=1"/>
</xsd:schema>
</types>
<message name="remove">
<part name="parameters" element="tns:remove"/>
</message>
<message name="count">
<part name="parameters" element="tns:count"/>
</message>
<message name="countResponse">
<part name="parameters" element="tns:countResponse"/>
</message>
<message name="find">
<part name="parameters" element="tns:find"/>
</message>
<message name="findResponse">
<part name="parameters" element="tns:findResponse"/>
</message>
<message name="create_1">
<part name="parameters" element="tns:create_1"/>
</message>

```

```
<message name="create_1Response">
<part name="parameters" element="tns:create_1Response"/>
</message>
<message name="create">
<part name="parameters" element="tns:create"/>
</message>
<message name="findRange">
<part name="parameters" element="tns:findRange"/>
</message>
<message name="findRangeResponse">
<part name="parameters" element="tns:findRangeResponse"/>
</message>
<message name="edit">
<part name="parameters" element="tns:edit"/>
</message>
<message name="findAll">
<part name="parameters" element="tns:findAll"/>
</message>
<message name="findAllResponse">
<part name="parameters" element="tns:findAllResponse"/>
</message>
<portType name="ArticlesService">
<operation name="remove">
<input wsam:Action="http://services/ArticlesService/remove" message="tns:remove"/>
</operation>
<operation name="count">
<input wsam:Action="http://services/ArticlesService/countRequest" message="tns:count"/>
<output wsam:Action="http://services/ArticlesService/countResponse"
message="tns:countResponse"/>
</operation>
<operation name="find">
<input wsam:Action="http://services/ArticlesService/findRequest" message="tns:find"/>
<output wsam:Action="http://services/ArticlesService/findResponse"
message="tns:findResponse"/>
</operation>
<operation name="create_1">
<input wsam:Action="http://services/ArticlesService/create_1Request" message="tns:create_1"/>
<output wsam:Action="http://services/ArticlesService/create_1Response"
message="tns:create_1Response"/>
</operation>
<operation name="create">
<input wsam:Action="http://services/ArticlesService/create" message="tns:create"/>
</operation>
<operation name="findRange">
<input wsam:Action="http://services/ArticlesService/findRangeRequest"
message="tns:findRange"/>
<output wsam:Action="http://services/ArticlesService/findRangeResponse"
message="tns:findRangeResponse"/>
</operation>
<operation name="edit">
```

```

<input wsam:Action="http://services/ArticlesService/edit" message="tns:edit"/>
</operation>
<operation name="findAll">
<input wsam:Action="http://services/ArticlesService/findAllRequest" message="tns:findAll"/>
<output wsam:Action="http://services/ArticlesService/findAllResponse"
message="tns:findAllResponse"/>
</operation>
</portType>
<binding name="ArticlesServicePortBinding" type="tns:ArticlesService">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
<operation name="remove">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="count">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="find">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="create_1">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="create">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="findRange">

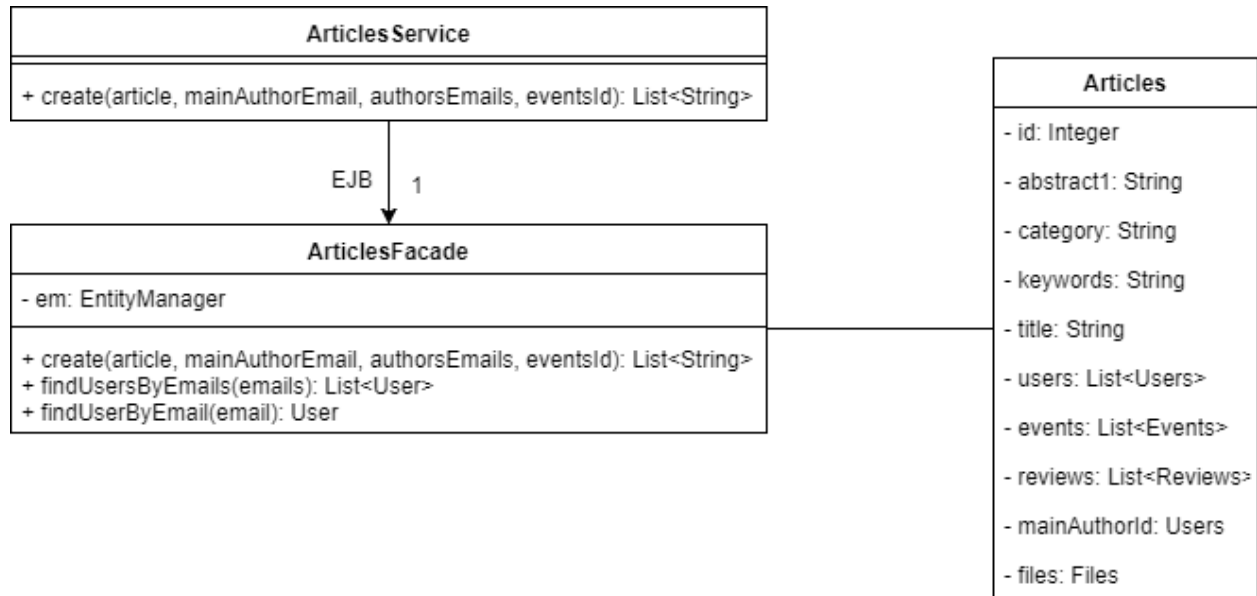
```

```

<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="edit">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="findAll">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
</binding>
<service name="ArticlesService">
<port name="ArticlesServicePort" binding="tns:ArticlesServicePortBinding">
<soap:address location="http://localhost:8080/ArticlesService/ArticlesService"/>
</port>
</service>
</definitions>

```

- Diseño



Servicio de artículos ArticlesService que por medio de un Enterprise Java Bean consume los métodos provistos por la fachada de artículos (ArticlesFacade), utilizando la entidad de artículos (Articles).

La entidad Articles contiene:

- id: identificador único.
- abstract1: resumen del artículo.
- category: categoría a la que pertenecen los documentos.
- keywords: lista de palabras clave.
- title: título del artículo.
- users: usuarios creadores del artículo.
- events: eventos asociados.
- reviews: revisiones realizadas.
- mainAuthorId: identificador único del autor principal.
- files: archivos relacionados.

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAll xmlns:ns2="http://services/" />
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAllResponse xmlns:ns2="http://services/" />
  </S:Body>
</S:Envelope>
```

- **EventsService**
 - Esquema

```
<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><xs:schema xmlns:tns="http://services/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" targetNamespace="http://services/">
```

```
<xs:element name="count" type="tns:count"/>
```

```
<xs:element name="countResponse" type="tns:countResponse"/>
```

```
<xs:element name="create" type="tns:create"/>
```

```
<xs:element name="edit" type="tns:edit"/>
```

```
<xs:element name="events" type="tns:events"/>
```

```
<xs:element name="find" type="tns:find"/>
```

```
<xs:element name="findAll" type="tns:findAll"/>
```

```
<xs:element name="findAllResponse" type="tns:findAllResponse"/>
```

```
<xs:element name="findRange" type="tns:findRange"/>
```

```
<xs:element name="findRangeResponse" type="tns:findRangeResponse"/>
```

```
<xs:element name="findResponse" type="tns:findResponse"/>
```



```
<xs:element name="remove" type="tns:remove"/>

<xs:element name="users" type="tns:users"/>

<xs:complexType name="count">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="countResponse">
<xs:sequence>
<xs:element name="return" type="xs:int"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="create">
<xs:sequence>
<xs:element name="entity" type="tns:events" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="events">
<xs:sequence>
<xs:element name="date" type="xs:dateTime" minOccurs="0"/>
<xs:element name="deadline" type="xs:dateTime" minOccurs="0"/>
<xs:element name="description" type="xs:string" minOccurs="0"/>
<xs:element name="editorId" type="tns:users" minOccurs="0"/>
<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="location" type="xs:string" minOccurs="0"/>
<xs:element name="name" type="xs:string" minOccurs="0"/>
<xs:element name="submissionstart" type="xs:dateTime" minOccurs="0"/>
<xs:element name="website" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="users">
<xs:sequence>
<xs:element name="birthdate" type="xs:dateTime" minOccurs="0"/>
<xs:element name="email" type="xs:string" minOccurs="0"/>
<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="name" type="xs:string" minOccurs="0"/>
<xs:element name="password" type="xs:string" minOccurs="0"/>
<xs:element name="role" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="remove">
<xs:sequence>
<xs:element name="entity" type="tns:events" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
```

```

<xs:complexType name="findAll">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="findAllResponse">
<xs:sequence>
<xs:element name="return" type="tns:events" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="find">
<xs:sequence>
<xs:element name="id" type="xs:anyType" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findResponse">
<xs:sequence>
<xs:element name="return" type="tns:events" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findRange">
<xs:sequence>
<xs:element name="range" type="xs:int" nillable="true" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findRangeResponse">
<xs:sequence>
<xs:element name="return" type="tns:events" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="edit">
<xs:sequence>
<xs:element name="entity" type="tns:events" minOccurs="0"/>
</xs:sequence>
</xs:complexType>
</xs:schema>

```

- WSDL

```

<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><!-- Generated by JAX-WS RI
(http://jax-ws.java.net). RI's version is Metro/2.3.2-b608 (trunk-7979;
2015-01-21T12:50:19+0000) JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12

```

```
JAXB-RI/2.2.12-b141219.1637 JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><definitions
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://www.w3.org/ns/ws-policy"
xmlns:wsp1_2="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://services/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://services/" name="EventsService">
<types>
<xsd:schema>
<xsd:import namespace="http://services/"
schemaLocation="http://localhost:8080/EventsService/EventsService?xsd=1"/>
</xsd:schema>
</types>
<message name="remove">
<part name="parameters" element="tns:remove"/>
</message>
<message name="count">
<part name="parameters" element="tns:count"/>
</message>
<message name="countResponse">
<part name="parameters" element="tns:countResponse"/>
</message>
<message name="find">
<part name="parameters" element="tns:find"/>
</message>
<message name="findResponse">
<part name="parameters" element="tns:findResponse"/>
</message>
<message name="create">
<part name="parameters" element="tns:create"/>
</message>
<message name="findRange">
<part name="parameters" element="tns:findRange"/>
</message>
<message name="findRangeResponse">
<part name="parameters" element="tns:findRangeResponse"/>
</message>
<message name="edit">
<part name="parameters" element="tns:edit"/>
</message>
<message name="findAll">
<part name="parameters" element="tns:findAll"/>
</message>
<message name="findAllResponse">
<part name="parameters" element="tns:findAllResponse"/>
</message>
<portType name="EventsService">
<operation name="remove">
<input wsam:Action="http://services/EventsService/remove" message="tns:remove"/>
```

```

</operation>
<operation name="count">
<input wsam:Action="http://services/EventsService/countRequest" message="tns:count"/>
<output wsam:Action="http://services/EventsService/countResponse"
message="tns:countResponse"/>
</operation>
<operation name="find">
<input wsam:Action="http://services/EventsService/findRequest" message="tns:find"/>
<output wsam:Action="http://services/EventsService/findResponse" message="tns:findResponse"/>
</operation>
<operation name="create">
<input wsam:Action="http://services/EventsService/create" message="tns:create"/>
</operation>
<operation name="findRange">
<input wsam:Action="http://services/EventsService/findRangeRequest" message="tns:findRange"/>
<output wsam:Action="http://services/EventsService/findRangeResponse"
message="tns:findRangeResponse"/>
</operation>
<operation name="edit">
<input wsam:Action="http://services/EventsService/edit" message="tns:edit"/>
</operation>
<operation name="findAll">
<input wsam:Action="http://services/EventsService/findAllRequest" message="tns:findAll"/>
<output wsam:Action="http://services/EventsService/findAllResponse"
message="tns:findAllResponse"/>
</operation>
</portType>
<binding name="EventsServicePortBinding" type="tns:EventsService">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
<operation name="remove">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="count">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="find">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>

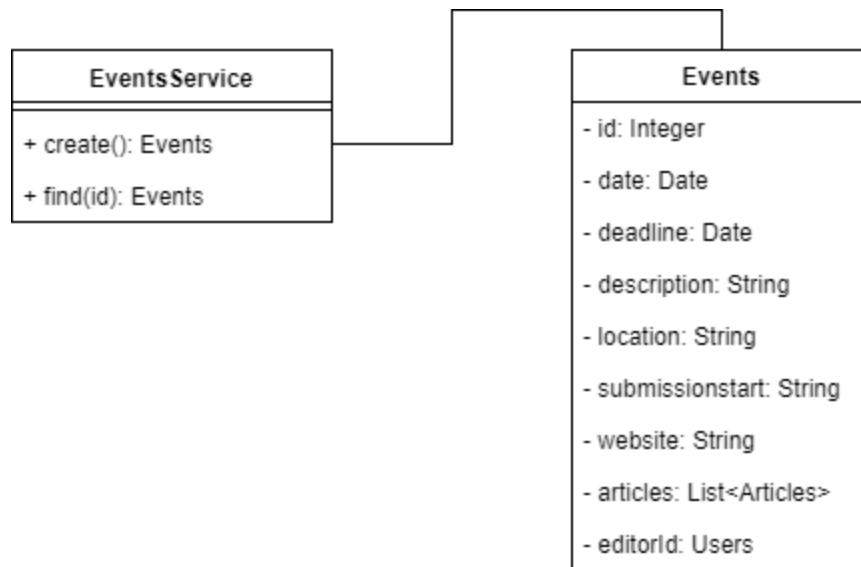
```

```

<soap:body use="literal"/>
</output>
</operation>
<operation name="create">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="findRange">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="edit">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="findAll">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
</binding>
<service name="EventsService">
<port name="EventsServicePort" binding="tns:EventsServicePortBinding">
<soap:address location="http://localhost:8080/EventsService/EventsService"/>
</port>
</service>
</definitions>

```

- Diseño



Servicio de eventos **EventsService** que expone sus servicios con el uso de la entidad de eventos (**Events**).

La entidad **Events** contiene:

- id: identificador único.
- date: fecha de creación del evento.
- deadline: fecha de cierre.
- description: detalles del evento.
- location: ubicación del evento.
- submissionstart: fecha de inicio del evento.
- website: dirección web.
- articles: artículos participantes.
- editorId: creador del evento.

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAll xmlns:ns2="http://services/">
    </S:Body>
  </S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:findAllResponse xmlns:ns2="http://services/">
      <return>
        <date>2017-10-14T00:00:00-05:00</date>
        <deadline>2017-12-12T00:00:00-05:00</deadline>
        <description>Mi primer evento</description>
        <editorId>
          <birthdate>2017-10-14T00:00:00-05:00</birthdate>
          <email>autor1@mail.com</email>
          <id>2</id>
          <name>Autor</name>
          <password>autor</password>
          <role>Author</role>
        </editorId>
        <id>1</id>
        <location>Bogota</location>
        <name>Evento 1</name>
        <submissionstart>2017-10-14T00:00:00-05:00</submissionstart>
        <website>evento.com</website>
      </return>
    </ns2:findAllResponse>
  </S:Body>
</S:Envelope>
```

- **ReviewsService**
 - Esquema

```
<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><xs:schema xmlns:tns="http://services/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" targetNamespace="http://services/">
```

```
<xs:element name="articles" type="tns:articles"/>
```

```
<xs:element name="count" type="tns:count"/>
```

```
<xs:element name="countResponse" type="tns:countResponse"/>
```

```
<xs:element name="create" type="tns:create"/>
```

```
<xs:element name="create_review" type="tns:create_review"/>
```

```
<xs:element name="edit" type="tns:edit"/>
```

```
<xs:element name="edit_review" type="tns:edit_review"/>
```

```
<xs:element name="edit_reviewResponse" type="tns:edit_reviewResponse"/>
```

```
<xs:element name="find" type="tns:find"/>
```

```
<xs:element name="findAll" type="tns:findAll"/>
```

```
<xs:element name="findAllResponse" type="tns:findAllResponse"/>

<xs:element name="findResponse" type="tns:findResponse"/>

<xs:element name="remove" type="tns:remove"/>

<xs:element name="reviews" type="tns:reviews"/>

<xs:element name="users" type="tns:users"/>

<xs:complexType name="find">
  <xs:sequence>
    <xs:element name="id" type="xs:anyType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="findResponse">
  <xs:sequence>
    <xs:element name="return" type="tns:reviews" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="reviews">
  <xs:sequence>
    <xs:element name="articleId" type="tns:articles" minOccurs="0"/>
    <xs:element name="date" type="xs:dateTime" minOccurs="0"/>
    <xs:element name="grade" type="xs:int"/>
    <xs:element name="id" type="xs:int" minOccurs="0"/>
    <xs:element name="message" type="xs:string" minOccurs="0"/>
    <xs:element name="reviewerId" type="tns:users" minOccurs="0"/>
    <xs:element name="status" type="xs:string" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="articles">
  <xs:sequence>
    <xs:element name="abstract1" type="xs:string" minOccurs="0"/>
    <xs:element name="category" type="xs:string" minOccurs="0"/>
    <xs:element name="id" type="xs:int" minOccurs="0"/>
    <xs:element name="keywords" type="xs:string" minOccurs="0"/>
    <xs:element name="mainAuthorId" type="tns:users" minOccurs="0"/>
    <xs:element name="title" type="xs:string" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="users">
  <xs:sequence>
    <xs:element name="birthdate" type="xs:dateTime" minOccurs="0"/>
    <xs:element name="email" type="xs:string" minOccurs="0"/>
```



```

<xs:element name="id" type="xs:int" minOccurs="0"/>
<xs:element name="name" type="xs:string" minOccurs="0"/>
<xs:element name="password" type="xs:string" minOccurs="0"/>
<xs:element name="role" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="edit_review">
<xs:sequence>
<xs:element name="id" type="xs:anyType" minOccurs="0"/>
<xs:element name="grade" type="xs:int"/>
<xs:element name="message" type="xs:string" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="edit_reviewResponse">
<xs:sequence>
<xs:element name="return" type="tns:reviews" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="edit">
<xs:sequence>
<xs:element name="entity" type="tns:reviews" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="remove">
<xs:sequence>
<xs:element name="entity" type="tns:reviews" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="findAll">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="findAllResponse">
<xs:sequence>
<xs:element name="return" type="tns:reviews" minOccurs="0" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="create">
<xs:sequence>
<xs:element name="entity" type="tns:reviews" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="create_review">

```

```

<xs:sequence>
<xs:element name="review" type="tns:reviews" minOccurs="0"/>
<xs:element name="reviewer" type="tns:users" minOccurs="0"/>
<xs:element name="article" type="tns:articles" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

<xs:complexType name="count">
<xs:sequence/>
</xs:complexType>

<xs:complexType name="countResponse">
<xs:sequence>
<xs:element name="return" type="xs:int"/>
</xs:sequence>
</xs:complexType>
</xs:schema>

```

○ WSDL

```

<?xml version='1.0' encoding='UTF-8'?><!-- Published by JAX-WS RI (http://jax-ws.java.net).
RI's version is Metro/2.3.2-b608 (trunk-7979; 2015-01-21T12:50:19+0000)
JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12 JAXB-RI/2.2.12-b141219.1637
JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><!-- Generated by JAX-WS RI
(http://jax-ws.java.net). RI's version is Metro/2.3.2-b608 (trunk-7979;
2015-01-21T12:50:19+0000) JAXWS-RI/2.2.11-b150120.1832 JAXWS-API/2.2.12
JAXB-RI/2.2.12-b141219.1637 JAXB-API/2.2.13-b141020.1521 svn-revision#unknown. --><definitions
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://www.w3.org/ns/ws-policy"
xmlns:wsp1_2="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://services/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://services/" name="ReviewsService">
<types>
<xsd:schema>
<xsd:import namespace="http://services/"
schemaLocation="http://localhost:8080/ReviewsService/ReviewsService?xsd=1"/>
</xsd:schema>
</types>
<message name="remove">
<part name="parameters" element="tns:remove"/>
</message>
<message name="count">
<part name="parameters" element="tns:count"/>
</message>
<message name="countResponse">
<part name="parameters" element="tns:countResponse"/>
</message>
<message name="find">

```

```
<part name="parameters" element="tns:find"/>
</message>
<message name="findResponse">
<part name="parameters" element="tns:findResponse"/>
</message>
<message name="create">
<part name="parameters" element="tns:create"/>
</message>
<message name="create_review">
<part name="parameters" element="tns:create_review"/>
</message>
<message name="edit_review">
<part name="parameters" element="tns:edit_review"/>
</message>
<message name="edit_reviewResponse">
<part name="parameters" element="tns:edit_reviewResponse"/>
</message>
<message name="edit">
<part name="parameters" element="tns:edit"/>
</message>
<message name="findAll">
<part name="parameters" element="tns:findAll"/>
</message>
<message name="findAllResponse">
<part name="parameters" element="tns:findAllResponse"/>
</message>
<portType name="ReviewsService">
<operation name="remove">
<input wsam:Action="http://services/ReviewsService/remove" message="tns:remove"/>
</operation>
<operation name="count">
<input wsam:Action="http://services/ReviewsService/countRequest" message="tns:count"/>
<output wsam:Action="http://services/ReviewsService/countResponse"
message="tns:countResponse"/>
</operation>
<operation name="find">
<input wsam:Action="http://services/ReviewsService/findRequest" message="tns:find"/>
<output wsam:Action="http://services/ReviewsService/findResponse" message="tns:findResponse"/>
</operation>
<operation name="create">
<input wsam:Action="http://services/ReviewsService/create" message="tns:create"/>
</operation>
<operation name="create_review">
<input wsam:Action="http://services/ReviewsService/create_review"
message="tns:create_review"/>
</operation>
<operation name="edit_review">
<input wsam:Action="http://services/ReviewsService/edit_reviewRequest"
message="tns:edit_review"/>
<output wsam:Action="http://services/ReviewsService/edit_reviewResponse"
```

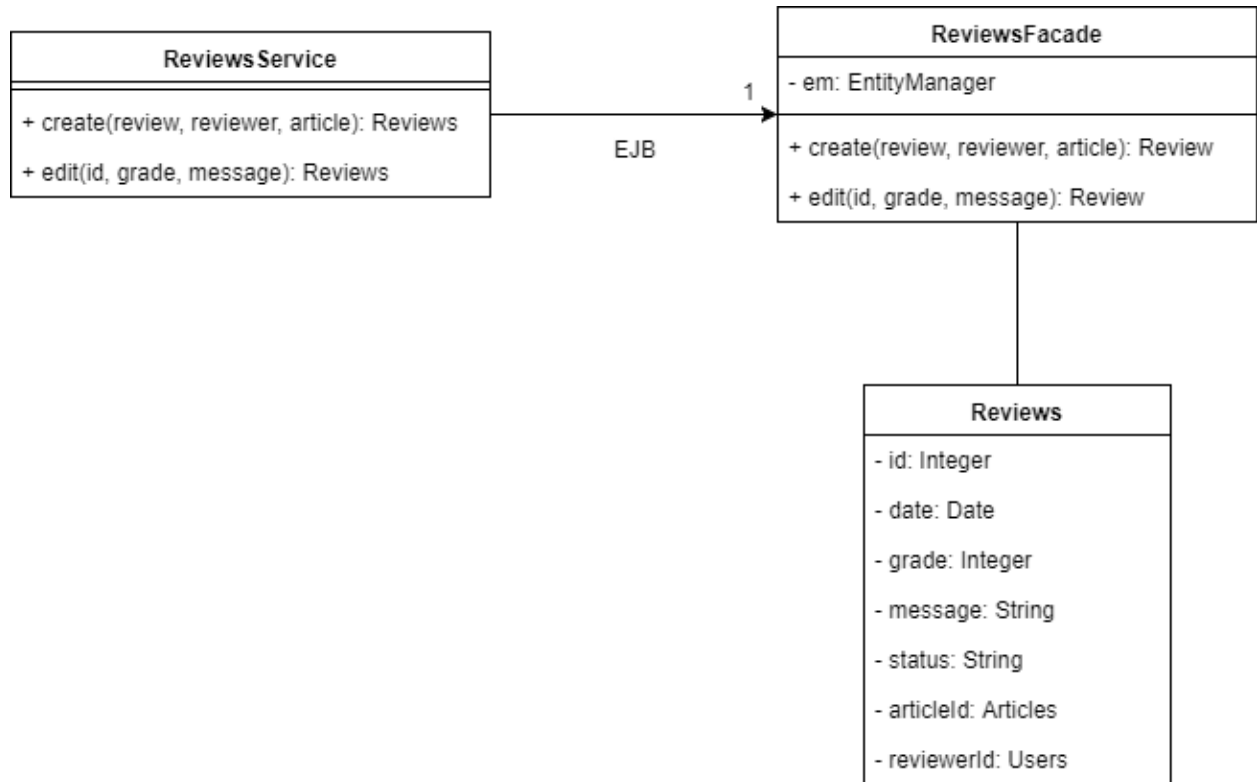
```
message="tns:edit_reviewResponse"/>
</operation>
<operation name="edit">
<input wsam:Action="http://services/ReviewsService/edit" message="tns:edit"/>
</operation>
<operation name="findAll">
<input wsam:Action="http://services/ReviewsService/findAllRequest" message="tns:findAll"/>
<output wsam:Action="http://services/ReviewsService/findAllResponse"
message="tns:findAllResponse"/>
</operation>
</portType>
<binding name="ReviewsServicePortBinding" type="tns:ReviewsService">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
<operation name="remove">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="count">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="find">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="create">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="create_review">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="edit_review">
```

```

<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
<operation name="edit">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
</operation>
<operation name="findAll">
<soap:operation soapAction=""/>
<input>
<soap:body use="literal"/>
</input>
<output>
<soap:body use="literal"/>
</output>
</operation>
</binding>
<service name="ReviewsService">
<port name="ReviewsServicePort" binding="tns:ReviewsServicePortBinding">
<soap:address location="http://localhost:8080/ReviewsService/ReviewsService"/>
</port>
</service>
</definitions>

```

- Diseño



Servicio de revisiones **ReviewsService** que por medio de un Enterprise Java Bean consume los métodos provistos por la fachada de revisiones (**ReviewsFacade**), utilizando la entidad de revisiones (**Reviews**).

La entidad **Reviews** contiene:

- id: identificador único.
- date: fecha de revisión.
- grade: calificación asignada.
- message: mensaje acompañante a la calificación.
- status: estado actual de la revisión.
- articleId: identificador único del artículo asociado.
- reviewerId: identificador único del revisor.