System Functionality

Name: ARSA (Online Sporting Goods)

System provides user with buying sporting goods. It is an online shopping store which provides sports accessories. First of all user can select among different categories of the sport for which he/she is interested in buying accessories for. Based on that system will navigate the user to the particular page displaying products for the category that user has selected at the first place. User can select the product and add it to shopping cart. After this, User can check out and buy the selected products.

List of RESTful Services:

**Retrieving Categories and Products**

1. GET http://localhost:8080/ARSA/categories

This will return a list of main categories with the name and their id.

<category>

<id>1</id>

<name>Soccer</name>

<image></image>

</category>

1. GET [http://localhost:8080/ARSA/category/{id}](http://localhost:8080/ARSA/category/%7bid%7d)

This will return a list of category with the ID specified in the URL.

For Example

GET <http://localhost:8080/ARSA/category/1> gets the detail of the specific category having ID as 1.

1. GET <http://localhost:8080/ARSA/category?startIndex=1&size=4>

This specifies the start index of the category from where we want to start sending our categories objects and size parameter determines how many of categories will be returned.

1. GET <http://localhost:8080/ARSA/products>

This URL will return list of all the products for all the categories.

1. GET [http://localhost:8080/ARSA/category/{id}/products](http://localhost:8080/ARSA/category/%7bid%7d/products)

This URL will return the list of products under the specific categories. The result will contain the name and id of every product under the category specified by the ID.

For Example:

<Category id=”1”>

<product>

<id>1</id>

<name>Football</name>

<image></image>

</product>

<product>

<id>2</id>

<name>Shoes</name>

<image></image>

</product>

</Category>

1. GET [http://localhost:8080/ARSA/products/{id}](http://localhost:8080/ARSA/products/%7bid%7d)

This URL will retrieve individual product with the ID specified.

**Creating New Categories and Products**

**Using POST**

Creating new Category

1. POST /ARSA/category

This will create a new category. The client is also responsible for uploading the xml document specifying the details for the category.

<Category>

<id>5</id>

<name>Ice Hockey</name>

<image></image>

<Category>

This will result in creation of new category. It will return xml document which will also contain the URL for the category created.

<Category>

<link rel=”self” href=”http::/ARSA/category/5

<id>5</id>

<name>Ice Hockey</name>

<image></image>

</Category>

1. POST /ARSA/product

Similarly for product. Client has to pass the xml in which the id of the main category will be specified along with the name and id of the product.

<Category id=”1”>

<product>

<id>6</id>

<name>Soccer Jerseys</name>

<image></image>

</product>

</Category>

This will create a new product under the specified category i-e using ID and returns the xml document also containing the URL for the newly created product.

<Category id=”1”>

<link rel=”self” href=”http::/ARSA/category/1/product/5

<product>

<id>6</id>

<name>Soccer Jerseys</name>

<image></image>

</product>

</Category>

**Updating Categories and Products**

**Updating the category:**

1. PUT /ARSA/category/{id}

The user will provide the id of the category in this case to update the category. User will also provide the xml document regarding the new representation of the object it is updating. The sample xml document will look like this:

<Category>

<id</id>

<name></name>

<image></image>

</Category>

In this way, Client can update name or image regarding to a particular category.

1. PUT /ARSA/category/{id}/product/{id}

Similarly user can update a particular product inside a particular category. Client will provide the category id along with the particular product ID in the URL. And along with this, client will provide the xml representation for the object to be updated.

<Category id=”2”>

<product>

<id>6</id>

<name>Soccer Jerseys</name>

<image></image>

</product>

</Category>

…………………………………………………………………………………………………………………………………………………………………..