School: Sample Learning School

Teacher:

Id: Number

Name: String

Age: Number

Gender: M/F(String)

Subjects: List<Subject>

Subject:

ID: Number

Name: String

Autor: String

Student:

ID: Number

Name: String

Age: Number

Address: String

Class\_STD: Number

Subjects: List<Subject>

**REST API Definition:**

To get All the students List:

HTTP Method: GET

URL: <http://localhost:8080/restapp/students>

RESPONSE: JSON/XML Format having all the students.

To get specific student:

HTTP Method: GET

URL: <http://localhost:8080/restapp/students>/{studentid}

RESPONSE: JSON/XML Format having particular student record if found.

To Add a student in existing List:

HTTP Method: POST

URL: <http://localhost:8080/sample/restapp/students>

RESPONSE: JSON/XML Format having all the Student list [Including new Student]

To Update a student in existing List:

HTTP Method: PUT

URL: <http://localhost:8080/sample/restapp/students>

RESPONSE: JSON/XML Format having all updated Student list

To delete a student from existing List:

HTTP Method: DELETE

URL: <http://localhost:8080/sample/restapp/students>/{studentid}

RESPONSE: JSON/XML Format having all the Student list [except above studentid student]

**Problem:**

Real life scenario:

* + A student have multiple subjects enrolled
  + A Student have multiple teaches who teaches their subject.
  + A Student have yearly report for the respective subject marks/test score.

**Resolution:**

* + A Student is having multiple subjects -> One to Many Relationship
  + A Student gets taught by multiple teaches -> One to Many Relationship
  + A student has multiple yearly basis report card -> One to Many Relationship

Api details:

To Determine which all subject a student studies.

* + - Assumption: All the subjects are decided based on in which class a student studies.

URL: GET [http://localhost:8080/sample/restapp/student/{studentId}/subjects](http://localhost:8080/sample/restapp/student/%7bstudentId%7d/subjects)

RESPONSE: All the subjects which this student studies in its given class.

API to get all the subjects:

* + - URL GET: http://localhost:8080/sample/restapp/subjects