**Project C.F.S Component – Database Management Services**

**Course:** Advanced Software Engineering

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**Description**

The purpose of this component is to provide a client with database management services such as CRUD operations with database tables, and Insert, Read, Update and Delete queries for database elements.

**Arguments**

* **Server**: This is the string representation of your database server IP address or name
* **Database**: This is a string representation of database name
* **User Id/name**: This is a string representation of your database user name
* **Password**: This is a string representation of your database password
* **Database Type**: This string representation of database type this currently supports the following server types:
  + mssql: For Microsoft SQL server
  + mysql: For mySQL servers
* **Query**: This is a string representation of your SQL query

**Using java to access the web service**

Service serv = Service.create(new URL(

"http://url/ws\_CRUD?wsdl"),

new QName("http://tempuri.org/", "ws\_CRUD"));

ws\_CRUD p = serv.getPort(ws\_CRUD.class);

p.GetResultFromSource(your server name, your database name, your user name, password, database type, query);

**Using .net to access the web service**

* You must first add the web reference (url to the web service) to your application
* You can access the web service by making the following call:

ServicesAPI.DB\_CRUD.ws\_CRUD sample = ServicesAPI.DB\_CRUD.ws\_CRUD();

sample.GetResultFromSource(your server name, your database name, your user name, password, database type(e.g mysql), query);

**Output**

* **Code** 
  + 223: success
  + 224: sql exception
  + 225: other exceptions
* **Data**
  + A JSON object with values retrieved from the database if a data is select query is performed or a status, delete or update with a description what happened.
* **Debug**
  + data: status if process failed
  + message: this gives exemption which may occurs from the database or otherwise

**Output example**

{"code": 223, "data": [{"id":"aj3013"}], "debug": {"data":"","message":""}}