Project – Redhat REST Web Services

Objective

The purpose of this project is to introduce students to Web Services development using redhat RESTful Java Web Services. In assignment solutions, students shall demonstrate how this technique can be used to construct interoperable software modules in service environments implemented by **Java** and tested using **Postman application**.

System Description

Implement an API online shopping website where customers can register, login and purchase items online.

System EJBs:

➢ Customer, Item and Order

Item has: id, name
Order has: customer, list of items
Customer has: id, username, password, role (admin or customer), list of orders.

Service

➢ The **Service** has a list of customers and admins.
➢ The Service exposes the following end points:

o For the admin:
register
loginAsAdmin
CreateAnItem
ViewOrdersByCustomerId
viewAllOrders
blockCustomer
getRoleofCurrentUser

o For the customer:
register
loginAsCustomer
createOrder (list of Items)
viewOrderByID
ViewAllCustomerOrders
getRoleofCurrentUser

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System Testing

- ➢ The input and output of all functions that takes entities as parameters or return entities should be of type JSON Objects
- ➢ The Service must use persistence (database) not just in memory data.
- ➢ Testing the api will be done through post man.
- ➢ For example, to test createAnItem: suppose the url is
  localhost:8080/myproject/api/createAnItem
  And the body is a JSON Object as {"name":"sunglasses"} // an item
  The return type may be a "success message" as a string or as a JSON Object

Notes

- ✓ **P.S.** You must handle any exceptions that may occur.
- ✓ **Team size:** The assignment should be done in teams of size 2 at most.
- ✓ **Submission:** You should submit all the needed source code to properly run the application, as one zip file. Submission should be done solely through Blackboard. Email submissions will be ignored.
- ✓ **Submission naming:** ID1_ID2_Group
- ✓ **Deadline: Monday 7th of June**