

# EDYODA DIGITAL UNIVERSITY

## **JAVA Developer Assessment – Test 2** ***[Amazon Replica – Coding Round]***

## Problem Details

- The app is a minimalistic replica of Amazon. It allows admins to manage products and members to order those products.
- The end-users for this JAVA app will be
  - Admins
  - Members

## Application Details

- **Login/Register Functionality:**
  - User should be able to register as an Admin or Member
  - Users should be able to log in using Email and Password
  - Post login if the user is an admin then show the following menu:
    - Create Product
    - View Product List
    - Update Product
    - Delete Product – It should delete a product based on the ProductID.
    - Logout
  - Post login if the user is a member then show the following menu:
    - Create New Order
    - View Order History – Show the list of all the orders placed by the logged-in user. For example, [{"Order ID": "ORD2", "Product Name": "K95", "Price": 10000, "Discount": "20%", "Price after Discount": 8000.0, "Quantity": 4, "Total Cost": 32000, "Ordered By": "Priya Kumar", "Delivering to": "House no. 48, Bandra East, Mumbai India"}]
    - Update Profile – The user should be allowed to change password and address details.
    - Logout

- **Create/Update Product Functionality:**

- The admin should be able to create/update a product. They can update the following details:
  - ProductID - Autogenerated value to uniquely identify a product.
  - Name
  - Manufacturer Name
  - Price
  - Discount (Value will be a percentage). For example, 10 will mean 10%; 25 will mean 25%.
  - Total Stock Available
- In case of update functionality, show the list of products and based on ProductID, allow admin to update the details.

- **Product Listing Functionality:**

- The products created by the logged-in admin should be displayed to him/her and not from all the admins.
- For each product following details need to be displayed
  - ProductID - Autogenerated value to uniquely identify a product.
  - Name
  - Manufacturer Name
  - Price
  - Discount
  - Total Stock Available
- For example, [{"Created By": "Test Admin 1", "Product ID": "GTRX1", "Product Name": "GEFORCE RTX 3070", "Manufacturer Name": "Nvidia", "Price": 70000, "Discount": "30%", "Total Stock Available": 10}, {"Created By": "Test Admin 1", "Product ID": "KBC95", "Product Name": "K95", "Manufacturer Name": "Corsair", "Price": 10000, "Discount": "20%", "Total Stock Available": 50}]

- **Create Order Functionality:**

- Members should be able to create new orders.
- Show a list of product IDs and the user will enter one productID to select the product and quantity for that product.
- The products list will contain products from all the admins.
- There can only be one product in an individual order. For example, an order can have 5 quantities of "Apples", another order can have 12 quantities of "Dell mouse".
- Users cannot select if a product has a total stock of 0.

### **Common Functionalities:**

- Login – Both admins and members can log in to the application.
- Registration:
  - The user should enter the following details to register to the application:
    - Name
    - Email
    - Password
    - Full Address
- If any of the validations fail then show appropriate error messages. For example, if someone tries to enter a name in place of a contact number then an error should be displayed saying, "Please enter a valid contact number".
- It is not mandatory to use a database for storing data. You can use either a database or JSON files.
- You do not have to design a Web App or UI for this project. The entire application can run in the command line.

### **Grading Details**

- **Total Grades:** 200
- **Passing Grades:** 140

## Result/Report Details

- **The result, grades, and reports will be shared tentatively on 31st January 2022.**

## Submission Details

- You have to submit the code URL. Please upload all your code in a folder on Google drive. Please ensure that the folder is available publicly or else the grading team will give you zero marks. To check that please try to open the URL in incognito mode. You have to share the public URL of this google drive folder.
- ***Please ensure that you DO NOT COPY the code from your batch mates or the internet. Our proctoring tool will detect the plagiarism and you will receive zero marks in the exam.***
- ***Please DO NOT share your code publicly. If anyone copies your code then both you and the other person will receive zero marks.***
- You have to submit the project video. You can upload the video on Vimeo, Youtube, Google Drive etc. Please ensure that the video is publicly available. To check that please try to open the URL in incognito mode. Please follow the video structure as explained in the video details section below.
- You have to submit both the URLs on the certification details page on the classroom portal. Follow the steps below:

- Goto Round 2 card on certification details page

The screenshot shows the 'Python Certification' page on the EDYODA platform. The header includes the EDYODA logo, 'Classroom' and 'Certification' tabs, a user profile 'Hi Test Learner!', and a '400 Max Score' indicator. The main content area is titled 'ROUND 2 - PBPY Project Building' and 'Scheduled at 07 Nov 2021 | 02:00 PM'. It details the exam structure: 'Exam will include Project' and 'Exam Duration 34 Hours'. Instructions state that users can attempt this round only after clearing Round 1 and that the problem statement link will be available at 2:00 PM. A 'SUBMIT PROJECT' button is visible at the bottom right of the card.

- Click on “Submit Project” button
- Fill the form in the popup and submit. Your project does not require a hosted web app URL so you can simply paste the video URL itself.

The screenshot shows a 'Submit Project Links' popup form overlaid on the certification page. The form has three input fields: 'Code File URL \*', 'Public Video URL \*', and 'Hosted Web App URL \*'. A blue 'SUBMIT' button is at the bottom. The background page is dimmed, showing the same 'Python Certification' details as the previous screenshot.

- Please ensure that you make your submissions before **10th Jan'22 11:59 PM IST** sharp. **No late submissions will be accepted.**

## Video Details

- The duration of the video should be max 20 minutes.

- Total marks for the video is 100.
- You can record the video using zoom, loom or any other screen recording tool.
- ***Please ensure that the laptop time is visible in the screenshare recording. Failing to do so will result in losing 25marks.***
- Please ensure that your video is also visible on the top right side of the screen.
- The video needs to be structured in 3 sections:
  - **Project Walkthrough (Max 3 minutes)**
    - You have to give a product demo of your app. Basically, talk about all the functionalities and show them live.
  - **Code Walkthrough (Max 10 minutes)**
    - Project Architecture:
      - You have to talk about how you have structured the app – module-wise or functionality-wise or file-type-basis or something else and why?
    - Screenwise files walkthrough
      - You have to talk about a project screen and all the files used for it.
  - **QnA (Max 7 minutes): Please answer the following questions**
    - Explain the class structure and the relation between them.
    - Explain how you are storing the order details?
    - ***Failing to answer the above questions correctly will result in losing 25 marks.***