

Data Scientist Intern Assignment (Financial Data Reporting)

Objective:

Develop a Java application using Maven/springboot that generates financial reports in PDF format using Jasper Studio and Jasper Reports.

Assignment Overview

You will be provided with retail trade sales data in a separate CSV file, which contains sales of goods and services for each year. Additionally, a sample report will be provided for your reference to design the report template.

Steps: Your task is to perform bellow mentioned steps

1. Install Jasper Studio:

- i) Visit the [Jaspersoft Community website](#) and download the latest version of Jasper Studio.
- ii) Ensure you have the Java Development Kit (JDK) installed on your machine. You can download it from the Oracle website. Jasper Studio requires JDK to compile report.
- iii) Locate the downloaded Jasper Studio installer file (e.g., TIB_js-jss_x.x.x_windows_x86_64.exe) and double-click it to start the installation process.
- iv) Once the installation is complete, you can launch Jasper Studio.
- v) On the first launch, you may need to configure the workspace directory where Jasper Studio will store your projects. You can use the default location or specify a new one.
- vi) To verify that Jasper Studio is installed correctly, you can create a new report.

2. Jasper Studio Template Design:

- Design report templates in Jasper Studio using the provided financial data (retail_trade_sales.xlsx) and the sample report (retail_trade_sales.pdf) for reference.
- Export designed report template as a '.jrxml' file.

3. Java Project Setup:

- Create a Maven-based Java project.
- Add the necessary Jasper Reports dependencies to the pom.xml file.
- Create a Java class to:
 - Load the '.jrxml' file.
 - Prepare a Map or a Java Bean to hold the financial data (trade sales).
 - Fill the report with the data using the **Jasper Reports** API.
 - Export the filled report as a PDF file to a specified location.

Submission:

Project Files:

- Create a **GitHub** repository and push all the necessary code files, jrxml file and generated report and share repo link to us through mail.
- If you're not familiar with **GitHub**, do compress all the project files and output files into zip file and share it to us through email.

Key Considerations:

Data Source: Define how the application will obtain the financial data (e.g., database, csv etc.,).

Parameterization: Allow the report to be parameterized (e.g., date range, company name).

Bonus Points:

Styling: Use styles and themes to improve the visual appeal of the reports.

Error Handling: Implement proper error handling and logging to catch potential issues.

Code Quality: Emphasize clean code, proper documentation, and adherence to coding standards.

SUBMISSION DEADLINE

Please submit the assignment along with your GitHub link / files to our email by 23rd Dec 2025.

Note: Feel free to submit the assignment even if it is partially done.

CONTACT FOR QUERIES

If you have any questions or require clarification, please reach out to:

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