**Project Report: PDF Generator for Employee Reports using Java 1.** Project Title

PDF Generator for Employee Report**2. Objective**

The objective of this project is to automate the generation of PDF reports for employee records retrieved from a MySQL database. It enables structured, readable, and printable reports using Java and the Apache PDFBox library.**3. Tools & Technologies Used**

| **Tool/Technology** | **Purpose** |
| --- | --- |
| Java | Main programming language |
| Apache PDFBox | Library for creating PDF documents |
| MySQL | Database to store employee data |
| JDBC | For connecting Java to MySQL |
| Maven | Project management and dependencies |
| IDE (Eclipse) | Development environment |
| **OS** | Windows |

**4. Functional Overview**

1. Connect to MySQL Database using JDBC.
2. Fetch Employee Data using DatabaseUtil class.
3. Generate PDF Report using PDFReportGenerator class.
4. Format PDF with employee details: ID, Name, Department, Salary.
5. Save PDF with timestamp in the filename inside /reports directory.

**5. Project Structure**

**pdfReport/**

**├── App.java # Main driver class**

**├── Employee.java # Model class for Employee**

**├── DatabaseUtil.java # Handles DB connection and data fetching**

**├── PDFReportGenerator.java # Handles PDF creation and formatting**

**└── reports/ # Output directory for PDF files**

**6. Code Summary**

**Employee.java**  
A POJO class with fields: id, name, department, salary and respective getters/setters.

**DatabaseUtil.java**

* Establishes JDBC connection to MySQL.
* Executes SQL query: SELECT \* FROM employees.
* Maps result set to list of Employee objects.

**PDFReportGenerator.java**

* Creates PDF using Apache PDFBox.
* Adds title, then loops through employee list and adds each record to the PDF.
* Saves the file with a unique timestamp.

**App.java**

* Main class that runs the application.
* Calls DatabaseUtil.fetchEmployees() and PDFReportGenerator.generateReport(...).

**7. Sample Output PDF Content**

Employee Report has been successfully generated

ID: 101, Name: Priyanka Potta, Dept: IT, Salary: ₹500000.0

ID: 102, Name: Rahul Sharma, Dept: HR, Salary: ₹450000.0

...

PDF File Example:  
 employee.pdf

Saved at: reports/ folder**8. Sample Screenshot (Console)**

PDF report generated successfully!

**9. Error Handling**

* JDBC connection failures handled via SQLException.
* File I/O errors handled via IOException.
* Each exception is logged using e.printStackTrace().

**10. Conclusion**

This project demonstrates how Java can be integrated with JDBC to create automated, professional PDF reports from a database. It reduces manual reporting efforts, supports dynamic data, and can be extended to a full HR or payroll system.