**Project ideas   
For the “INFRRD COMPANY”**

**📊 1️ Automated Invoice Processing System (Python)**

👉 Upload an invoice PDF  
👉 Extract details like Invoice Number, Date, Vendor, Amount using PyMuPDF or pdfplumber  
👉 Store data in SQLite/MySQL  
👉 Validate amounts and dates  
👉 (Bonus: expose a REST API using Flask)

✅ **Why it matters:** Mimics real-world IDP workflows

**📝 2️ Document Classifier (Python + Scikit-learn)**

👉 Classify uploaded documents as ‘Invoice’, ‘Contract’, ‘Resume’, ‘Bill’ using text classification  
👉 Use TF-IDF + Naive Bayes or SVM  
👉 Build a small Streamlit/Flask frontend for demo

✅ **Why it matters:** Infrrd uses classification as one of their core services

**📈 3️ Data Validation API**

👉 Build a Python Flask API that takes JSON data extracted from documents  
👉 Validates fields (e.g., invoice total positive, due date in future, tax % within 0–18%)  
👉 Returns clean JSON responses or error messages

✅ **Why it matters:** Critical part of any document processing pipeline

**🔐 4️ Secure File Upload & Storage Service**

👉 Build an app to upload, scan, and store documents securely  
👉 Encrypt file contents before saving (using cryptography library)  
👉 Maintain upload logs

✅ **Why it matters:** Data security is huge in document automation

**🛠️ 5️ Mini OOP Console Project**

👉 Create a Python OOP-based “Document Manager” console app  
👉 Features: Add document, view document, classify document type, validate fields, delete document  
👉 Uses classes, inheritance, file handling

✅ **Why it matters:** Shows your OOP and real-world design skills