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| **HR Analytics – Employee Attrition Analysis**  **Project Overview**  This internship project explores employee attrition using the IBM HR Analytics Employee Attrition & Performance dataset. The objective was to identify key drivers of turnover and present actionable insights through a predictive model and interactive dashboard.  The project integrates Python for data cleaning, exploratory analysis, and logistic regression modeling, with Power BI for business storytelling. The final deliverables include a cleaned dataset, a reproducible python script, a dynamic Power BI dashboard, and a formal report.  **Tools Used:** Python, Power BI, GitHub  **Methodology**  **- Data Cleaning & Preparation:**  Removed irrelevant columns, encoded categorical variables, and created age group bins for demographic analysis.  **- Exploratory Data Analysis (EDA):**  Visualized attrition trends across departments, job roles, salary bands, and overtime status. Correlation analysis was performed to identify significant predictors.  **- Predictive Modeling:**  Built a logistic regression model to estimate attrition likelihood. SHAP values were used to interpret model outputs and rank feature importance.  **- Dashboard Development:**  Designed a Power BI dashboard with KPIs, interactive charts, and slicers. Included Smart Narrative for automated insights  **Outcomes**  **-** Delivered a clean, Power BI–ready dataset from Python.  - Built a professional dashboard with dynamic visuals and KPIs.  - Demonstrated proficiency in data storytelling, dashboard design, and stakeholder communication. |