

# **Project Title:**

## **Big Data Analysis with IBM Cloud Databases**

### **Phase 1: Problem Definition and Design Thinking**

#### **Problem Definition**

The primary goal of this project is to conduct comprehensive big data analysis using IBM Cloud Databases. Our aim is to uncover valuable insights hidden within extensive datasets, spanning domains such as climate trends and social patterns. This project encompasses:

- Designing the analysis process
- Setting up IBM Cloud Databases
- Conducting data analysis
- Visualizing results
- Deriving actionable business intelligence

#### **Design Thinking Approach**

##### **Data Selection**

- Identify and prioritize datasets (e.g., climate data, social media trends) based on relevance to project objectives.

##### **Database Setup**

- Select appropriate IBM Cloud Databases.
- Configure databases for scalability, performance, and data security.

**Data Exploration**

- Develop queries and scripts for in-depth data exploration.
- Ensure data quality through cleaning and preprocessing.

**Analysis Techniques**

- Choose suitable analysis methods (e.g., statistical analysis, machine learning).
- Build predictive models when applicable.

**Visualization**

- Design impactful data visualizations using charts, graphs, and dashboards.
- Enhance visualizations with interactivity.

**Business Insights**

- Interpret analysis findings in the context of project goals.
- Provide actionable recommendations for informed decision-making.