**Python Full Stack Development**

MongoDB Skill-End Project Problem Statement



**Skill-End Project**

**Setting up a Database for a Security Agency Using MongoDB**

**Project Agenda:** To create a MongoDB Atlas account, design the database using a NoSQL approach, and perform CRUD operations

**Description:** The objective of this assignment is to help you understand how to design a database using NoSQL. You will also be able to use Python OOPS and MongoDB Atlas to implement the NoSQL technique

Darwin runs a security agency where he provides security guards for his clients. His clients sometimes need security guards for a few hours or a few days. Based on his clients' requirements, Darwin offers three options for security guards to choose from, along with weekly and monthly charges.

To keep and maintain records of clients, security guards, and requests or resolutions, Darwin needs a software solution.

**Tools required:** Python SDK, MongoDB Compass (Optional), and PyMongo library

**Prerequisites:** Python and MongoDB

**Expected Deliverables:** You need to solve the problem by designing the database using NoSQL approach. Below are the tasks required to design the database:

* 1. Set up a MongoDB Atlas Cluster
  2. Create classes that represent documents
  3. Design the collection document structure which must have:
     1. Reference data structure
     2. Embedded data structure
  4. Connect to the MongoDB using Python
  5. Perform CRUD operations with MongoDB and Python for any one suitable document