**ML Model with IBM Watson**

Discover how to build and deploy a powerful ML model using IBM Watson. Explore the project's objective, design thinking process, and development phases.Learn about the predictive use case, dataset selection, model training, deployment process, and integration steps.Understand how the deployed model can be accessed and utilized for real- time predictions.

**Project Objective**

Analyse the requirements and define the objectives of the ML project.Explore various use cases and select the most promising one.

**Design Thinking Process**

**1)Ideate:**

Generate creative ideas for the ML model based on the project objective.

**2)Prototype:**

Build a basic model to test and validate the feasibility of the chosen approach.

**3)Test:**

Evaluate the prototype's performance and iterate on the design if needed.

**Dataset Selection**

Identify relevant and reliable datasets to train the ML model. Discuss data preprocessing techniques to ensure data quality and accuracy.

**Model Training**

**1)Feature Selection:**

Select the most important features to ensure accurate predictions.

**2)Algorithm Selection:**

Choose the appropriate ML algorithm based on the project requirements and dataset characteristics.

**3)Hyperparameter Tuning:**

Optimize the model's performance by fine-tuning the hyperparameters.

**Deployment Process**

**1)Model Evaluation:**

Assess the model's performance on a test dataset to ensure its accuracy and reliability.

**2)Model Packaging:**

Package the model and its dependencies for easy deployment to production environment.

**3)Scalability Considerations:**

Plan for the model's scalability, ensuring it can handle larger datasets and increased user demand.

**Integration Steps**

**1)API Development:**

Create APIs to expose the ML model's functionalities for seamless integration with other applications.

**2)Data Source Integration:**

Integrate the ML model with the data source for real-time data ingestion and processing.

**3)UI Integration:**

Integrate the ML model's output into a user-friendly interface for easy interaction and visualization.

**Real-Time Predictions**

Once deployed, discover how to access and utilize the ML model for real-time predictions. Explore examples of real-world applications and the potential impact of the model.