## DOMAIN:CLOUD APPLICATION DEVELOPMENT

## TITLE: “MACHINE LEARNING MODEL DEPLOYMENT

## WITH IBM CLOUD WATSON STUDIO”

## PROBLEM DEFINITION:

## Machine learning models are becoming increasingly important for businesses of all sizes. However, deploying and managing machine learning models can be complex and challenging.One of the biggest challenges of machine learning model deployment is ensuring that the model is performing well in production. This can be difficult because production data may be different from the data that the model was trained on. Additionally, production environments can be more complex and unpredictable than training environments.Another challenge of machine learning model deployment is monitoring and maintaining the model. Once a model is deployed, it is important to monitor its performance and make adjustments as needed

## DESIGN THINKING STEPS:

## The project follows a design thinking approach, beginning with a comprehensive problem definition that identifies the need for a virtual cinema platform. It then proceeds through various stages:

## 1. \*Empathize with users:\* The first step is to empathize with the users of the machine learning model. What are their needs and pain points? What kind of experience do they want?

## For example, if you are deploying a machine learning model to predict customer churn, you need to understand the needs of the customer support team. What information do they need to be able to effectively reduce customer churn? How can the machine learning model help them to do their job better?

## 2. \*Define the problem: Once you have a good understanding of the users, you can start to define the problem that you are trying to solve. What are the specific challenges that the users are facing with deploying and managing machine learning models?

## 3. Ideate: Once you have defined the problem, it is time to start brainstorming solutions. This is where the design thinking process gets creative. Think outside the box and come up with as many ideas as possible.

## 4. \*Prototype:\* Once you have a few ideas, it is time to start prototyping them. This will allow you to test your ideas with users and get feedback.

## One way to prototype machine learning model deployment solutions is to use IBM Cloud Watson Studio. Watson Studio provides a variety of tools and services for building, training, and deploying machine learning models.

## 5. \*Test:\* Once you have a prototype that you are happy with, it is time to test it with a larger group of users. This will help you to identify any potential problems and make necessary changes.

## Once you have tested your prototype and made any necessary changes, you are ready to deploy your machine learning model deployment solution to production.