**Title: My journey at Pickl.AI: Build a machine learning model to identify credit card defaults**

**Introduction:**

**By Aakash Chauhan (Intern at Pickl.AI)**

Hello, readers! Today, I'm excited to share my incredible journey through the project and internship at Pickl.AI. Working at Pickl.AI has been a transformative experience, giving me the opportunity to immerse myself in the worlds of artificial intelligence and machine learning. In this blog, I will guide you through my journey to Pickl.AI.

**Chapter 1: Join Pickl.AI**

As an AI enthusiast, I am constantly looking for opportunities to apply my skills and expand my knowledge. When I got to know Pickl.AI, I knew it was the perfect match for my aspirations. With enthusiasm and anticipation, I applied and quickly became an intern at Pickl.AI

Pickl.AI provided me with a comprehensive data science full course, guiding me from a beginner to an advanced level. This well-structured course offered a perfect path for my journey in the field of data science. It began by introducing me to the fundamental concepts of data science and the essential tools used in the industry. As I progressed, I learned to harness the power of Excel for data manipulation and analysis. Python programming followed as it is a crucial skill for any aspiring data scientist.

The course didn't stop there; it delved into the realm of statistics, equipping me with the necessary knowledge to draw meaningful insights from data. The highlight of the course was undoubtedly the exploration of various machine-learning models. Through hands-on assignments and quizzes, I had the opportunity to apply my newfound knowledge to practical questions, enhancing my learning experience and skill development.

I am truly grateful to all the dedicated instructors who made this course entertaining and engaging. Their expertise and passion for teaching shone through every lesson. Moreover, the internship aspect of the program added tremendous value to my overall growth. The live sessions, knowledge-sharing interactions, and real-world projects helped me gain invaluable experience and a deeper understanding of data science concepts in action.

In conclusion, this data science course by Pickl.AI has been a transformative experience, offering me a clear and comprehensive learning journey. I highly recommend it to anyone seeking a solid foundation and practical expertise in the field of data science. Thank you to the entire team for providing such an enriching educational opportunity!

**Chapter 2: Project - Development of credit card payment default prediction model**

At Pickl.AI, I was assigned an important project:

to create a powerful machine-learning model capable of identifying credit card defaulters. The goal is to leverage historical credit card data to predict whether customers are likely to miss future payments. This predictive model will help financial institutions assess risk and make informed decisions while providing credit to customers.

**Chapter 3: Understanding data**

Before diving into model development, I spent a considerable amount of time digging through the data we had. The dataset includes various characteristics such as credit history, payment habits, education status, and more. In addition, it contains information indicating whether each customer has defaulted or not.

Exploratory data analysis (EDA) plays an important role in revealing insights about data. I visualized the feature distributions, checked for missing values, and identified potential outliers. This process is important for pre-processing the data and selecting relevant features for the model.

**Chapter 4: Data preprocessing and feature engineering**

The next step involves data preprocessing and feature engineering. I cleaned up the dataset managing missing and outliers, and making sure the data was ready for modelling. Feature engineering is the fun part of the process, as I create new features from existing features, with the goal of capturing more meaningful patterns and relationships.

**Chapter 5: Model selection and training**

The choice of model is an important decision. I have tested many different machine learning algorithms including logistic regression, random forest, decision tree, and support vector machines. Each model has strengths and weaknesses, and I evaluated their performance using measures such as accuracy, precision, recall, and F1 scores, confusion matrix.

To improve the performance of the model, I used techniques such as cross-validation, hyperparameter tuning, and aggregation methods. The iterative process of training and tuning the models helped me achieve a very successful credit card default prediction model.

**Chapter 6: Model evaluation and deployment**

After getting a promising model, it's time to evaluate. I split the dataset into a training set and a test set to evaluate the model's generalization performance on unseen data. Rigorous testing and validation are essential to ensure model reliability and efficiency.

**Conclusion:**

My journey at Pickl.AI has been an incredible learning experience. Not only did I sharpen my machine-learning skills, but I also gained valuable knowledge. Building a credit card default prediction model is a challenging but rewarding task, demonstrating the power of AI in making informed decisions.

I am grateful for the support of my mentors and the collaborative work environment at Pickl.AI. This internship laid the foundation for my career in AI and inspired me to continue exploring innovative solutions to real-world challenges. If you are passionate about AI and want to make a positive impact in the data science industry, I highly recommend exploring opportunities at AI-focused companies like Pickl.AI. With the right guidance and dedication, you too can join the groundbreaking projects that are shaping the future of AI.

Thank you for joining me on this journey and I hope you find this blog insightful and inspiring. Until next time, keep learning and innovating!