**ODI Batsman Career Runs Prediction 🏏**

This project builds a machine learning model to predict the total career runs of a One Day International (ODI) batsman based on their historical performance data. The model is deployed as an interactive web application using Streamlit.

**Live Application**

**You can access and use the live predictive model here:**

[**https://kx5vtc59s42utwnub26ogi.streamlit.app/**](https://www.google.com/search?q=https://kx5vtc59s42utwnub26ogi.streamlit.app/&authuser=1)

**GitHub Repository**

The complete source code, dataset, and trained model are available in this GitHub repository:

[**https://github.com/NabinSapkota34/Data-Science-Certification-Final-Project-Nabin**](https://github.com/NabinSapkota34/Data-Science-Certification-Final-Project-Nabin)

**How to Run This Project Locally**

If you wish to run the application on your own machine, follow these simple steps.

**Prerequisites**

* Python 3.7+
* Git

**Instructions**

1. **Clone the repository:**

Bash

git clone https://github.com/NabinSapkota34/Data-Science-Certification-Final-Project-Nabin.git

cd Data-Science-Certification-Final-Project-Nabin

1. **Install the required libraries:**

Bash

pip install -r requirements.txt

1. **Run the Streamlit app:**

Bash

streamlit run app.py

Your web browser will automatically open with the application running.

**About the Project**

This end-to-end data science project covers the complete lifecycle from data exploration to deployment.

* **Dataset**: The model was trained on the odb.csv dataset, which contains career statistics for over 100 ODI batsmen.
* **Model**: A RandomForestRegressor was used to build the predictive model. The script model\_training.py handles all steps, including data cleaning, feature engineering, and model training.
* **Technology**: The project utilizes Python with Pandas for data manipulation, Scikit-learn for machine learning, and Streamlit for creating the interactive web interface.