Graphical user interface, website

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Data Science Intern at Data Glacier

**Week 5:** Cloud and API deployment

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# Introduction:

In this project assignment, we will showcase how to deploy a trained machine learning model using Flask on the Heroku cloud app services. The model we will be using is a Random Forest Regressor, which was trained to predict the shipping cost estimate of sculptures based on features such as the price of sculpture, artist reputation, base shipping price, weight, and dimensions.

Deploying a machine learning model on a cloud platform like Heroku allows for easy accessibility and use of the model by others. The workflow for deploying the model involves creating a Flask web application that takes in user inputs and generates predictions using the trained model. Figure 1 below provides an overview of the workflow and the different components involved in the deployment process.



Figure 1: Deployment Workflow

A screenshot of a computer

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Description automatically generated with medium confidenceThe snapshots of the deployment are as follows:

Figure 2: Connecting Heroku to The GitHub Repository

Figure 3: Creating a New Repository on GitHub to Implement Heroku

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Figure 4: Application Deployment on Heroku

Graphical user interface

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Figure 5: Cloud Application Deployed API