

Assignment – 1: Predictive Modelling of Eating-Out Problem
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Data Science Technology and System

A PDF document with the following:

a. Link to the Tableau Dashboard

Ans:

https://public.tableau.com/views/Zomato_Tableau_17276124085530/Dashboard2?:language=en-US&publish=yes&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

b. The results of the (regression and classification) trained models on the test data. These results must be listed in two tables: one for the regression and another for the classification.

1. Regression Model:

Regression Models	MSE	RMSE	R-squared
Linear Model 1	0.167	0.408	0.219
Linear Model 2 (SGD)	0.175	0.419	0.178

2. Classification Model:

Confusion Matrix: (Class 1 vs Class 2)

Classification Models	True Positive	True Negative	False Positive	False Negative
Logistic Regressor	862	79	155	321
Random Forest	818	123	93	383
SVC	863	78	153	323
KNN	824	117	110	366

Classification Report:

Classification Models	Accuracy	Class	Precision	Recall	F1 - score
Logistic Regressor	83%	Class 1	85%	92%	88%
		Class 2	80%	67%	73%
Random Forest	85%	Class 1	90%	87%	88%
		Class 2	76%	80%	78%
SVC	84%	Class 1	85%	92%	88%
		Class 2	81%	68%	74%
KNN	84%	Class 1	88%	88%	88%
		Class 2	76%	77%	76%

c. The list of commands you have used to deploy your source code to the GitHub repository.

1. *Initializing the Git:*
git init
2. *Check the Status:*
Git status
3. *Staging:*
git add .
4. *Committing Git:*
git commit -m 'first assignment commit'
5. *Setting Up Remote repository and Pushing to Git hub:*
git remote add origin git@github.com:skhanal0313/DSTS_assignment_1.git
git branch -M main
git push -u origin main

d. The list of commands you have used to create and push the Docker image to the Docker Hub.

1. *Building the Docker Image:*
docker build -t dsts_assignment : creating Docker image from a Dockerfile
2. *Running the Docker Container:*
docker run -p 8000:8000 dsts_assignment
3. *Tagging the Docker Image:*
docker tag dsts_assignment skhanal0313/dsts_assignment
4. *Docker Hib Login:*
docker login
5. *Pushing the Image to Docker Hub:*
docker push skhanal0313/dsts_assignment

e. The Link of the source code you have deployed on GitHub (please add me as a collaborator; my GitHub account is radwanebrahim@gmail.com)

https://github.com/skhanal0313/DSTS_assignment_1.git

f. The link to the Docker image you deployed on the Docker Hub.

[docker pull skhanal0313/dsts_assignment](https://hub.docker.com/r/skhanal0313/dsts_assignment)