

# Model Deployment Report

Name: G2M insight for Cab investment

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Batch: LISUM05

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Data intake reviewer: N/A

Data storage location: [https://github.com/ahnoamu/DG\\_work/Week\\_4](https://github.com/ahnoamu/DG_work/Week_4)

## STEPS FOLLOWED FOR DEPLOYING MACHINE LEARNING MODEL THAT PREDICTS VIDEO GAME SALES

**(i) Conduct EDA on vgsales data:** Obtained video game sales data (vgsales.csv) from Kaggle (<https://www.kaggle.com/datasets/gregorut/videogamesales?resource=download>) and conducted exploratory data analysis.

**(ii) Construct model and save as pickle file:** Generated a regression model based on 4 features ('NA\_Sales', 'EU\_Sales', 'JP\_Sales', 'Other\_Sales'), and 1 label ('Global\_Sales'). The model was evaluated and saved using pickle.

**(iii) Generate prediction\_app.py:** This is a regular python file containing flask APIs which receives video game inputs through the user interface, then calculates the predicted Global sale value based on the regression model (reg\_model.py). The file returns the predicted value.

**(iv) Generate index.html:** This is a HTML file containing the structure of the web page. The file points to a web styling file (static/style.css) and company logo (images/Original.svg). The file creates a web interface used to prompt and obtain user input, then displays the predicted sale to the user when the submit button is clicked.

**(v) Create templates directory:** Move the index.html to this directory. Flask will identify the html file in this directory.

**(vi) Create static directory:** Contains subdirectories /css, with style.css file for web styling, and /images with company logo file Original.svg

**(vii) Deploy the model:** Run “python prediction\_app.py” to prompt the start of Flask API. Copy and paste the URL provided to a web browser to view the home address. Key in values to obtain Global Video game sale prediction.

## Snapshots

### 1. Server

```
* Serving Flask app "prediction_app"
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [10/May/2022 00:56:15] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [10/May/2022 00:56:15] "GET /static/css/style.css HTTP/1.1" 200 -
127.0.0.1 - - [10/May/2022 00:56:15] "GET /static/images/Original.svg HTTP/1.1" 200 -
127.0.0.1 - - [10/May/2022 00:56:15] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [10/May/2022 00:57:00] "POST /predict HTTP/1.1" 200 -
```


### 2. Web page

← → ↻ 127.0.0.1:5000/predict ☆

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## Predict Global VideoGame Sale

Predict

**Data Glacier**  
Your Deep Learning Partner

Global videogame sale should be \$  
287.99