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Create Model

```python
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
import pickle
```

```python
df1 = pd.read_csv('amazon_co-ecommerce_sample.csv')
```

```python
df = df1[['price','number_of_reviews','average_review_rating']]
df.loc[:,'average_review_rating'] = df.loc[:,'average_review_rating'].str.replace('out of 5 stars','')
df.loc[:,'price'] = df.loc[:,'price'].str.replace('£','')
df['number_of_reviews'] = pd.to_numeric(df['number_of_reviews'], errors='coerce')
df['price'] = pd.to_numeric(df['price'], errors='coerce')
df['average_review_rating'] = pd.to_numeric(df['average_review_rating'], errors='coerce')
df.fillna(0,inplace = True)
```

```python
x = df.iloc[:,1:3]
y = df.iloc[:,0]
```

```python
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
```

```python
regressor.fit(x,y)
```

```python
pickle.dump(regressor, open('model.pkl','wb'))
```

```python
model = pickle.load(open('model.pkl','rb'))
print(model.predict)
```

```
<bound method LinearModel.predict of LinearRegression()>
```

App.py

```python
import numpy as np
from flask import Flask, request, jsonify, render_template
import pickle
```

```python
app = Flask(__name__)
model = pickle.load(open('model.pkl', 'rb'))
```

```python
@app.route('/')
def home():
    return render_template('index.html')
```

```python
@app.route('/predict',methods = ['POST'])
def predict():
    '''
    For rendering results on HTML GUI
    '''
    int_features = [int(x) for x in request.form.values()]
    final_features = [np.arrary(int_features)]
    prediction = model.predict(final_features)

    output = round(prediction[0],2)

    return render_template('index.html', prediction_text = 'Price should be ${}'.format(output))
```

```python
if __name__ == '__main__':
    app.run(debug=True)
```

Create index.html

```html
<html>
<body>
    <h3>Iris Species Classification</h3>
<div>
  <form action="/predict" method="POST">
    <label for="seplen">income</label>
    <input type="number" step="0.01" id="seplen" name="seplen">
    <br>
    <label for="sepwid">age</label>
    <input type="number" step="0.01" id="sepwid" name="sepwid">
    <br>
    <label for="petlen">illness</label>
    <input type="number" step="0.01" id="petlen" name="petlen">
    <br>
    <label for="petwid">city</label>
    <input type="number" step="0.01" id="petwid" name="petwid">
    <br>
    <input type="submit" value="Submit">
  </form>
</div>
</body>
</html>
```