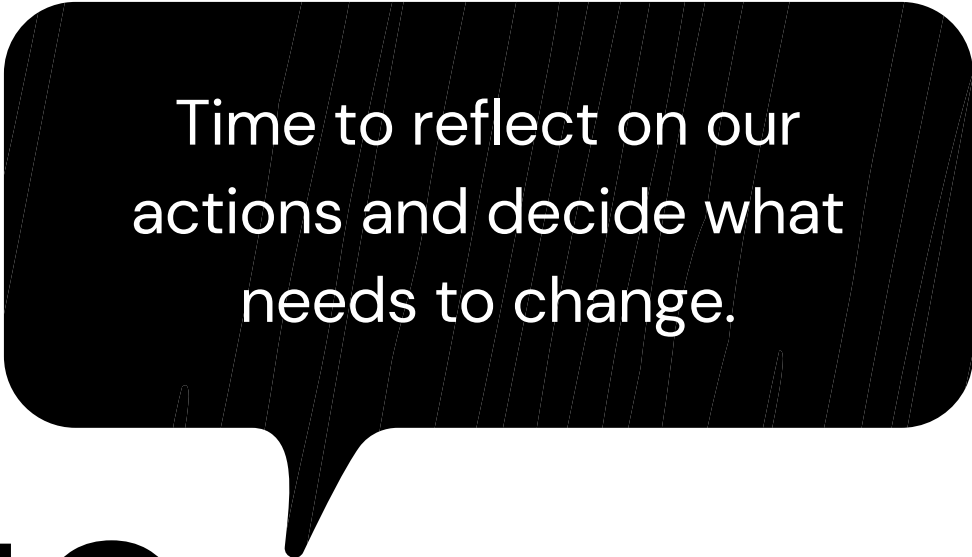


TEAM POPPIBOIS

CUBE HIGHWAY HACKATHON

**Stop  
Start  
Continue**



Time to reflect on our  
actions and decide what  
needs to change.

TEAM

Vishal Teotia      Jugal jain  
Tanishq Gupta    Vaibhav Gadag

# ENHANCING USER EXPERIENCE AT CUBE STOPS

# Solution Proposed

- Use deep learning model to predict the customer turnout
- Take registrations according to the DL model predictions
- Maintain a real-time database of tables.
- Manage customers
- Track real-time location of vehicles to estimate time of arrival
- Keep track of waiting time
- Manage pre-ordering
- Online bill payment
- Vehicle parking booking
- Drive-in facility

# Added Improvements

- Add a one-click booking option for individual drivers
- Real-time slot change in case of sudden traffic
- Add CNG gas station to the parking section
- Provide food coupons on fuel payment
- New features and facilities to attract more customers

# Add a one-click booking option for individual drivers

- Those who are driving alone can select the drive alone option
- They can then select the cube stop they want to stop at
- They will then get a notification as soon as they are at the nearest toll plaza to the cube stop (preferably 10-20 Km)
- The notification will give him two options- to book or to avoid
- If he clicks the book option, a table will be booked in the cube stop and his estimated time of arrival will be calculated by google maps API
- A GPS guide will automatically open on his phone which will guide him with the exact distance of the cube stop from his live location

2:00



 CubeStop Now

CubeStop

Your CubeStop is 15.3 km away.



Book

Avoid



Open Maps



# Real-time slot change in case of sudden traffic

- The app provides the management a continuous real-time update of the customers who have pre-booked via the app
- In case of unexpected delay due to sudden traffic, the manager can reschedule the waiting list and hereby provide tables to the customers arriving early
- Moreover, the reserved table can also be given to someone who has arrived already and hence there won't be a wastage of time for the cube stop

# Add CNG gas station to the parking section

- As the CNG filling takes time and on a long journey time is the main factor to be considered (Also, people generally don't like to wait in a queue or at the gas station).
- So we can add a CNG filling station in the parking section so the user can park the car and enjoy the meal or shopping.
- The amount of the gas will be added to the final bill payment of food or shopping.
- This will surely enhance the customer experience as at the same time multiple tasks can be completed.



# Provide food coupons on fuel payment

- Now, when the user has opted for fuelling the car or opted for CNG fuelling while parking, he will be given certain coupons on payment of the fuel through the cube stop app
- So now, while the fuel is being filled, the coupon will give him an incentive to order something from the cubestop food plaza
- This will make the lives of the users easier by making their on-road experience smoother as well as attract customers synergically


# New features and facilities to attract more customers


- An option which takes the arrival and destination from the user and suggest him the cube stop he can take rest at
- Create a chatbot to clear people's doubts and guide them with the hiccups they have in mind about cube stop
- Display the décor and interior of all the cube stop facilities on the home page and make them responsive, e.g. clicking on any image of food stop will take them to the booking optiona nd the menu page



Create an account

# Sign In

 JJ123

 .....

☐ Remember me

Log in

# Sign up




JJ123




First Name



Last Name



Your Email



.....



Repeat your password

Register



I am already member

# Cube Highway

Welcome to Cube Stop! Reserve a table and start ordering when you get there right in the comfort of your handheld device

Reserve a table »

Drive in »

## View your Upcoming Reservations

View Reservations you've made in the past that are coming up

View Reservations »





### Reserve a Table

Pick a Slot ▾

Number of people

Pick a vehicle ▾

Want to preorder ▾

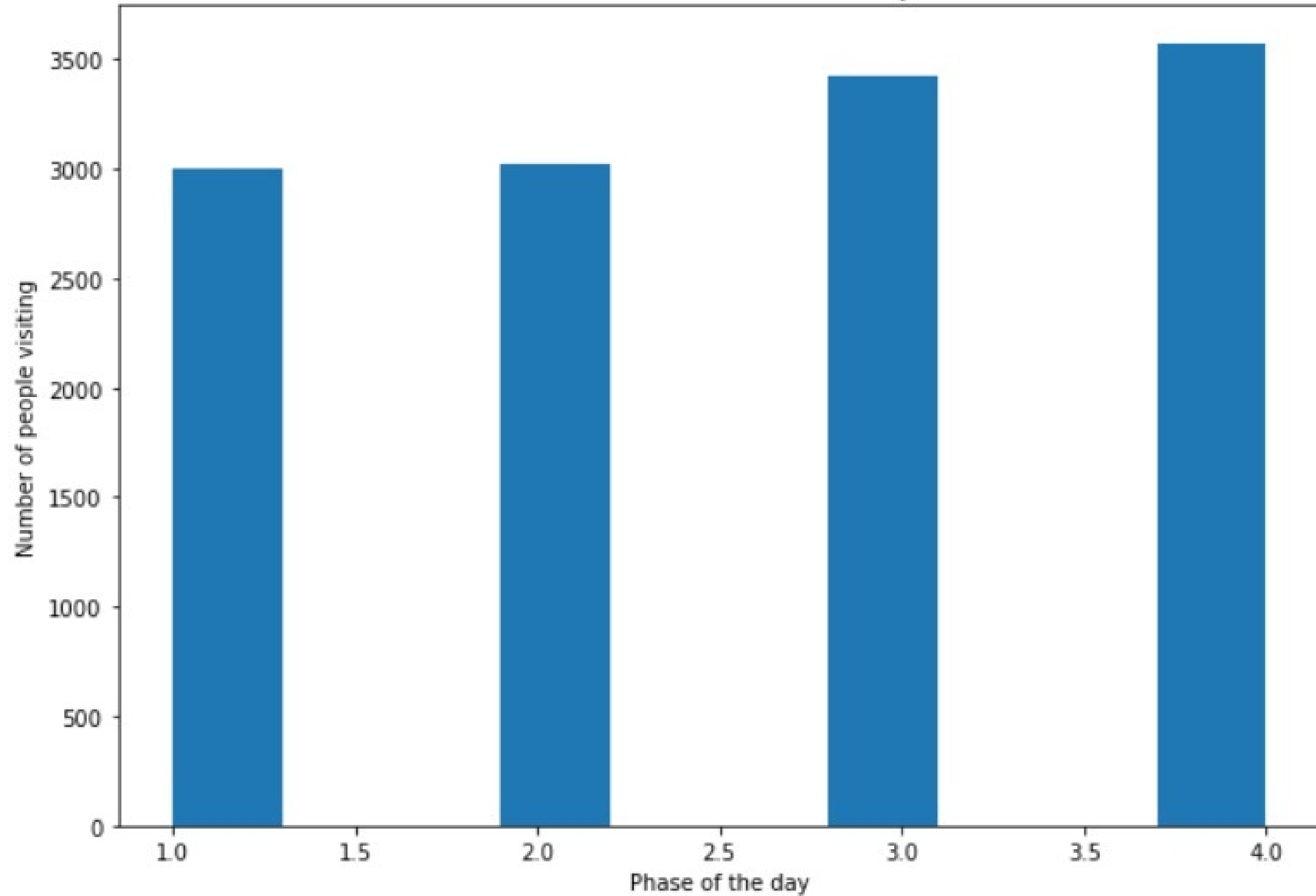
Reserve

# Building the deep learning model

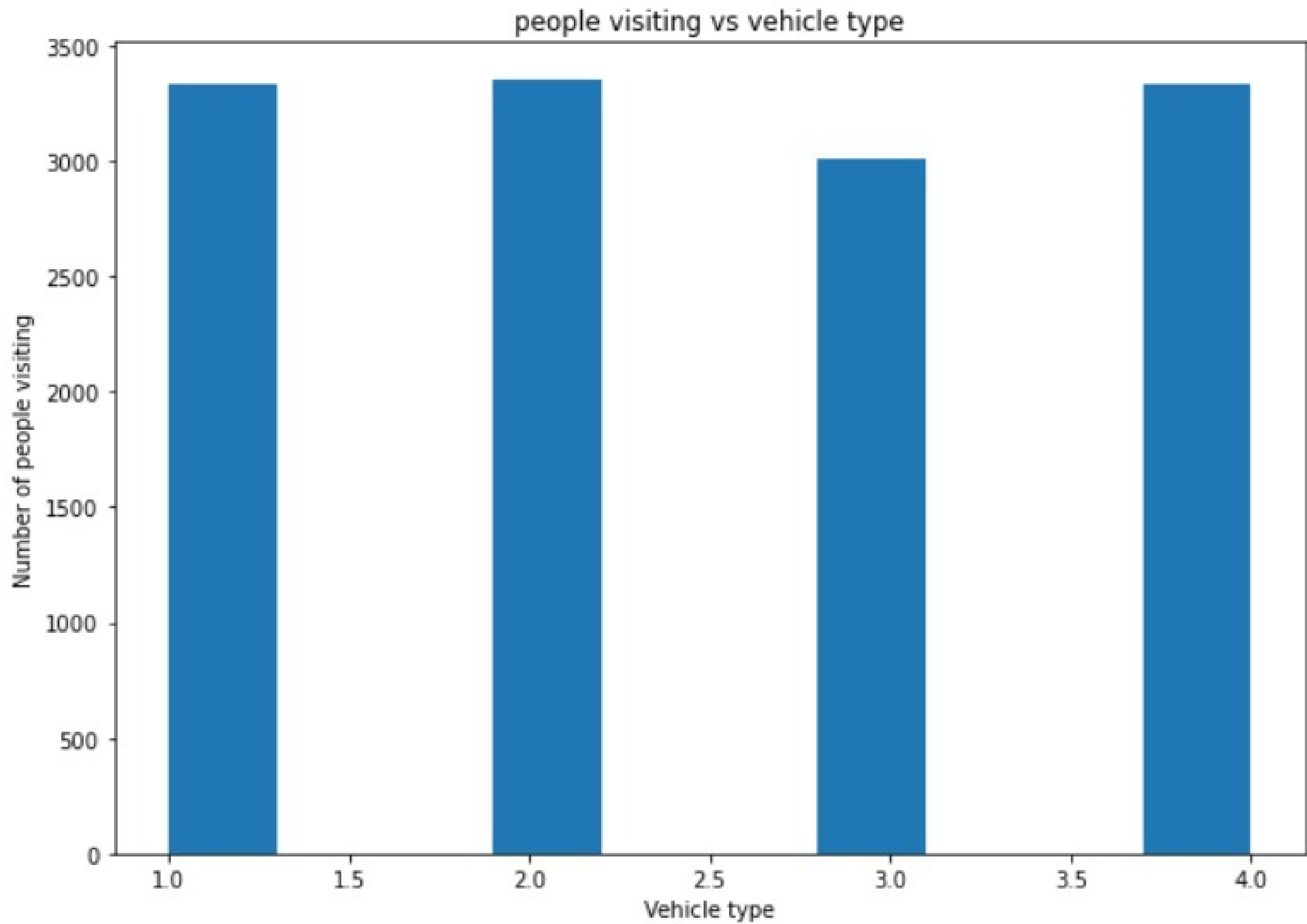
```
from numpy import loadtxt
from keras.models import Sequential
from keras.layers import Dense

# define the keras model
model = Sequential()
model.add(Dense(12, input_dim=4, activation='relu'))
model.add(Dense(6, activation='swish'))
model.add(Dense(1, activation='sigmoid'))
# compile the keras model
model.compile(loss='mean_squared_error', optimizer='adam', metrics=['accuracy'])
# fit the keras model on the dataset
model.fit(train_x, train_y, epochs=60, batch_size=10)
# evaluate the keras model
accuracy = model.evaluate(test_x, test_y)
```

Customer vs Phase of the day







**Reservation  
ID: 35**

Status: Awaiting  
confirmation from  
restaurant

People: 6

Predict: 15.72%

Slot: 8pm-12am

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 36**

Status: Awaiting  
confirmation from  
restaurant

People: 1

Predict: 37.35%

Slot: 8am-12pm

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 37**

Status: Awaiting  
confirmation from  
restaurant

People: 1

Predict: 24.67%

Slot: 4pm-8pm

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 38**

Status: Awaiting  
confirmation from  
restaurant

People: 1

Predict: 97.78%

Slot: 12pm-4pm

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 39**

Status: Awaiting  
confirmation from  
restaurant

People: 4

Predict: 99.29%

Slot: 8am-12pm

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 40**

Status: Awaiting  
confirmation from  
restaurant

People: 1

Predict: 29.05%

Slot: 8pm-12am

[Accept Reservation](#)  
[Decline Reservation](#)

**Reservation  
ID: 34**

Status: Your reservation request was cancelled by the restaurant

People: 4

Slot: 12pm-4pm

**Reservation  
ID: 35**

Status: Awaiting Bill Payment Confirmation

Table no: Table 7 for 6 person(s)

Slot: 8pm-12am

**Reservation  
ID: 37**

Status: Manager has confirmed. Start Ordering now!

Table no: Table 8 for 6 person(s)

Slot: 4pm-8pm

[Start Ordering!](#)

<div><div>Order ID: 51</div><div>Status: Preparing Table no: 7 User: JJ123 Item: Tandoori Salmon</div><div>Deliver Order</div></div>	<div><div>Order ID: 52</div><div>Status: Preparing Table no: 7 User: JJ123 Item: Bhunne Palak ke Kebab</div><div>Deliver Order</div></div>	<div><div>Order ID: 53</div><div>Status: Order Recieved Table no: 8 User: Tanishq_32 Item: Bhunne Palak ke Kebab</div><div>Start Preparing</div></div>	<div><div>Order ID: 54</div><div>Status: Order Recieved Table no: 7 User: JJ123 Item: Malai Kulfi</div><div>Start Preparing</div></div>
<div><div>Order ID: 55</div><div>Status: Preparing Table no: 8 User: Tanishq_32 Item: Tandoori Salmon</div><div>Deliver Order</div></div>	<div><div>Order ID: 56</div><div>Status: Order Recieved Table no: 7 User: vaibhavgadag Item: Murgh Malai Kebab</div><div>Start Preparing</div></div>	<div><div>Order ID: 57</div><div>Status: Preparing Table no: 7 User: vaibhavgadag Item: Multani Tikkey</div><div>Deliver Order</div></div>	<div><div>Order ID: 58</div><div>Status: Order Recieved Table no: 7 User: vaibhavgadag Item: Murgh Makhini</div><div>Start Preparing</div></div>
<div><div>Order ID: 59</div><div>Status: Order Recieved Table no: 7</div></div>	<div><div>Order ID: 60</div><div>Status: Order Recieved Table no: 7</div></div>	<div><div>Order ID: 61</div><div>Status: Order Recieved Table no: 7</div></div>	<div><div>Order ID: 62</div><div>Status: Order Recieved Table no: 8</div></div>

# Order

Place your orders here by clicking the plus next to the item and see the cart add your orders

## Starters

Murgh Malai Kebab 

Chicken Supreme, cream cheese, cilantro

Multani Tikkey 

Cottage Cheese, spices, flour batter

Tandoori Salmon 

Salmon steak spiked, bishop weed, cooked in clay oven

Bhunne Palak ke Kebab 

Rs 400 

Rs 300 

Rs 600 

Rs 300 

## Your cart 0

Total	Rs 0
<a href="#">Place Order Now!</a>	
<a href="#">Clear Your Cart!</a>	

## Orders Placed 0

Total	Rs 0
<a href="#">Pay Final Bill Now!</a>	

# Other marketing ideas to attract customers

- Develop a customer loyalty program. Offering free drinks and desserts is often a good choice because they're less expensive than an entrée, but they will still make your guests feel appreciated. You can set up a card that tracks points in your POS system
- Provide souvenirs to first-time visitors as a token of a gesture so that they remember the experience they had at the cube stop
- Discounts to customers for posting their pictures in cube stop on social media. This will help to fetch better reach and also showcase the wonderful facilities and infrastructure of the cube stop