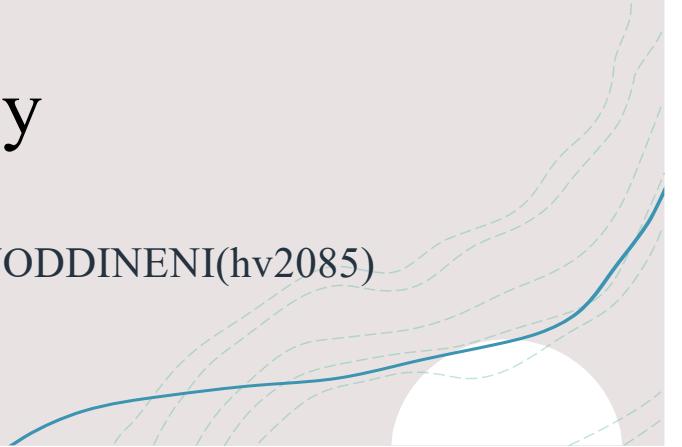




Hanmisha Travel Agency

HANMISHA VODDINENI(hv2085)



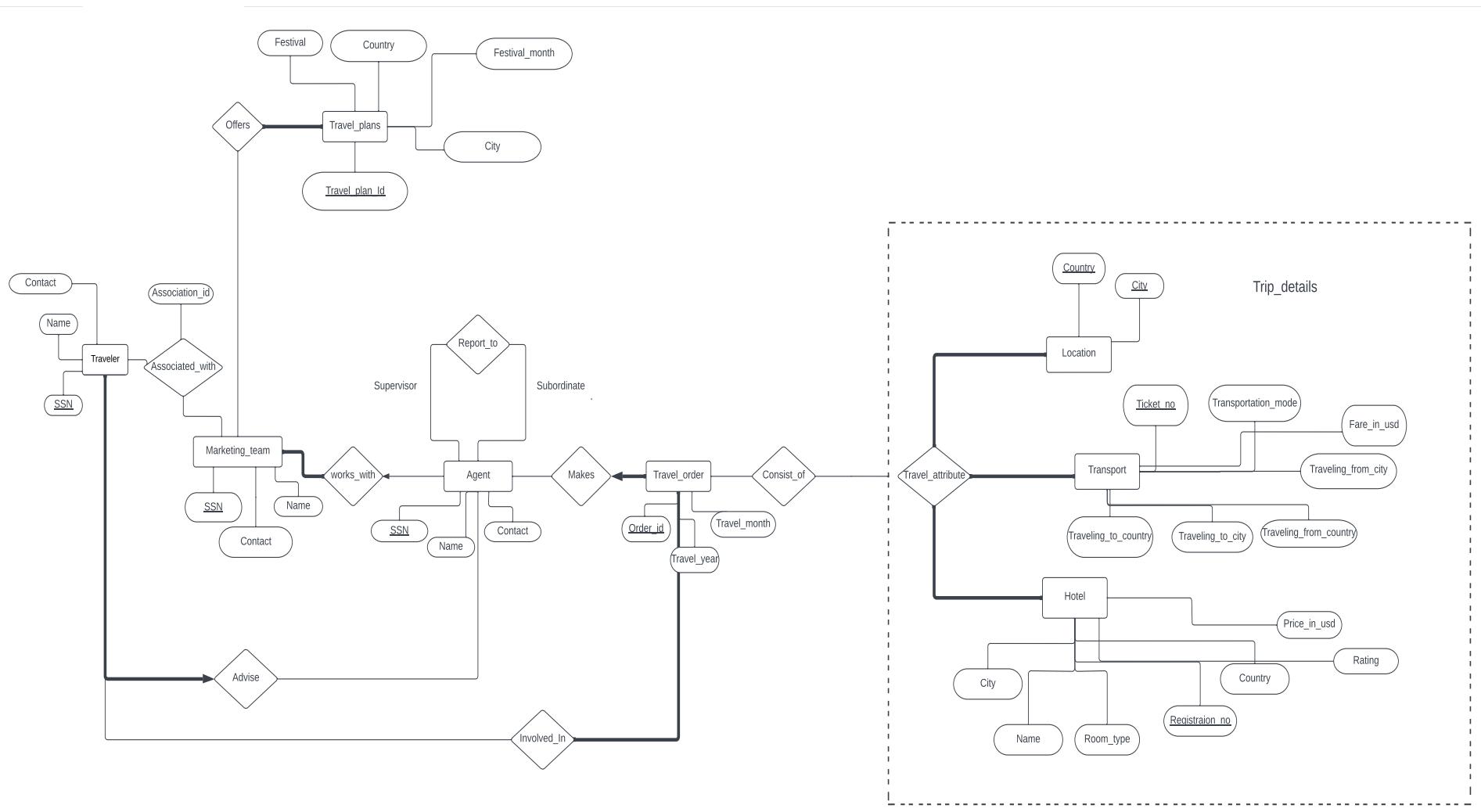
Welcome to Hanmisha - Our Travel Agency Portal for Employees and Customers

Our project is regarding ‘Travel Agency application’, Through this application we make it easier for a traveler to travel to the place his heart desires.

When a user wants his tour planned, he can contact a Marketing team individual who will assign him to an agent. This agent will guide him throughout the process.

Users’ plans are made and managed by one of the most valuable facilities ‘Agent’. An agent can help the traveler make his tour plan, the major elements in planning would be Location, Transportation facility and Hotel stay.

Based on the previous data, Our best deals etc an Agent will be able to assist the Traveler to find the best deal out of all the options available.



PROJECT:

In this project, we incorporated the first page with information about the exciting things our agency offers.

Agency Portal for Employees and Customers

Things Our Travel Agency Offers

Hello fellow Traveler:) Are you ready for your next adventure?

Look no further than KMisha Travel Agency! Our team of experienced travel experts will help you plan the perfect vacation, no matter your budget or travel preferences.

Whether you're looking for a romantic getaway, a thrilling adventure, or a relaxing beach trip, we have something for everyone. We offer personalized itineraries, competitive prices, and top-notch customer service to ensure that your trip is everything you've dreamed of and more. Don't spend hours scouring the internet for the best deals – let us do the work for you. From booking flights and hotels to arranging activities and transportation, we'll take care of all the details. All you have to do is sit back, relax, and start packing! Don't miss out on your dream vacation.

Contact KMisha Travel Agency today and start planning the trip of a lifetime. Book now and get ready to make memories that will last a lifetime!

PROJECT:

The next step would be to select one of the options

These are used for the purpose of selecting your role in our travel agency. The person can either choose ‘Employee’ or ‘Customer’ accordingly.

Once, the button is chosen the information will be displayed according your role

Please select your role at KMisha

Are you an Employee or a Customer

- Employee
- Customer

PROJECT: EMPLOYEE SECTION

If you selected employee option, You will be seeing some interesting information about our organization.

The first one would be our appreciation board.
We have categorized it into two parts:

1. Most popular agent, this tile is given to the person is handling most bookings. We acquired that from joining two tables and grouping and ordering based on name and booking count.
2. The Second one is Popular Marketing team representative. This title is given to the person from marketing who is handling most customers. In this query we joined three tables and retrieved the information by grouping and ordering the values and limiting the order to 1

```
try:  
    Var11=f"""select A.name, count(O.Agent_SSN) as Highest_booking_count  
        from Makes_Travel_order O, Agent_Works_with A  
        where O.Agent_SSN=A.SSN  
        group by A.Name  
        order by Highest_booking_count desc limit 1;"""
```

Appreciation Time!!

Here are KMisha's top performers

- Most popular agent among our customers
- Marketing team rep who brought most business to KMisha

	name	highest_booking_count
0	Lucy	7

Appreciation Time!!

Here are KMisha's top performers

- Most popular agent among our customers
- Marketing team rep who brought most business to KMisha

	name	customer_association_count
0	Arielle	15

```
try:  
    Var22=f"""select M.Name, count(Order_id) as Customer_association_count  
        from Marketing_team M, Agent_Works_with WW, Makes_Travel_order MTO  
        where M.SSN = WW.Marketing_team_SSN  
        and WW.SSN = MTO.Agent_SSN  
        group by M.Name  
        order by Customer_association_count desc limit 1;"""
```

PROJECT: EMPLOYEE SECTION

The information about our organization is provided here.

Firstly, we can see the hierarchical structure of our organization here. Data about who is the supervisor for a particular subordinate and vice versa is provided here

In the query below we made the pairs from Agent works in table for the supervisor and subordinate information. We are ordering the results by Name

```
y.  
  "See the organisation structure here"  
Var12=f"""select WW2.Name as Supervisor, WW1.Name as Subordinate  
      from Report_to RT, Agent_Works_with WW1, Agent_Works_with WW2  
     where RT.Supervisor_SSN = WW2.SSN  
       and RT.Subordinate_SSN = WW1.SSN  
   order by WW2.Name;"""
```

Information about ORG structure, Commissions and Company revenue

Choose an option-

- Hierarchical structure of our organisation
- Know about all Agents' commissions
- Know about Supervisors' additional commissions
- Total Revenue of the company

See the organisation structure here

	supervisor	subordinate
0	Aarav	Dylan
1	Aarav	Emmanuel
2	Aarav	Bruce
3	Aarav	Melissa
4	Brendon	Memphis
5	Brendon	Tara
6	Brendon	Marely
7	Brendon	Clark
8	Christine	Aryan
9	Christine	Lawrence

PROJECT: EMPLOYEE SECTION

Agent's commission is based on Hotel price for each booking and its corresponding rating. For example, if rating is above average, commission is 5% of the room price. If rating is below average, the commission is 3% of the booking price.

In the query we joined three tables and applied above conditions to create the list of commissions. We created a view to store this information and projected each agent with their commission as shown in the table.

```
Var13="""Create view A_commission as
(select WW.Name, WW.SSN, (Price_in_usd * 5)/100 as Agent_commission_in_usd
from Agent_Works_with WW, Makes_Travel_order MTO, Travel_order_consists_of_Trip_details TD, Hotel H1
where H1.rating >= (select avg(H2.rating) from Hotel H2)
and MTO.Agent_SSN = WW.SSN
and TD.Travel_order_Order_id = MTO.Order_id
and TD.Hotel_Registration_no = H1.Registration_no

UNION

select WW.Name, WW.SSN, (Price_in_usd * 3)/100 as Agent_commission_in_usd
from Agent_Works_with WW, Makes_Travel_order MTO, Travel_order_consists_of_Trip_details TD, Hotel H1
where H1.rating < (select avg(H2.rating) from Hotel H2)
and MTO.Agent_SSN = WW.SSN
and TD.Travel_order_Order_id = MTO.Order_id
and TD.Hotel_Registration_no = H1.Registration_no);"""

Var14=""" select name, ssn, sum(Agent_commission_in_usd) as Total_Commission
from A_commission
group by name, ssn
order by Total_Commission desc;"""
```

Information about ORG structure, Commissions and Company revenue

Choose an option-

- Hierarchical structure of our organisation
- Know about all Agents' commissions
- Know about Supervisors' additional commissions
- Total Revenue of the company

Here are the commission details—Agent's commission is based on Hotel price for each booking and its corresponding rating. For eg. if rating is above average, commission is 5% of the room price. If rating is below average, the commission is 3% of the booking price.

	name	ssn	total
0	Lucy	256706017	714
1	Emmanuel	526533387	283
2	Asher	562599246	175
3	Christine	851484165	150
4	Elizabeth	675036467	105
5	Marely	606390483	85
6	Aarav	821318681	75
7	Brendon	381061296	66
8	Camryn	786577145	60
9	Aryan	621390941	55

PROJECT: EMPLOYEE SECTION

Supervisors get additional 15% commission on their subordinates' commission value.

To get this result we created a view based on all agents' commission and applied above condition to calculate supervisor's commission and projected it as shown in the table.

```
y:  
    "Supervisors get additional 15% commission on their subordinates' commission value."  
Var16 = f"""create view A_total_commission as  
        (select name, ssn, sum(Agent_commission_in_usd) as Total_Commission  
        from A_commission  
        group by name, ssn  
        order by Total_Commission desc);"""  
  
Var171= f"""select OS.supervisor, (sum(AC.total_commission)*15)/100 as Supervisor_Commission  
        from Org_struct OS, A_total_commission AC  
        where OS.subordinate_ssn = AC.ssn  
        group by OS.supervisor  
        order by OS.supervisor;"""
```

Information about ORG structure, Commissions and Company revenue

Choose an option-

- Hierarchical structure of our organisation
- Know about all Agents' commissions
- Know about Supervisors' additional commissions
- Total Revenue of the company

Supervisors get additional 15% commission on their subordinates' commission value.

supervisor Aarav supervisor_commission 55.65000000000000 Name: 0, dtype: object

	supervisor	supervisor_commission
0	Aarav	55.65
1	Brendon	25.20
2	Christine	133.50
3	Jaslyn	51.00

PROJECT: EMPLOYEE SECTION

Our total revenue is calculated as 20% (Transport cost + Hotel cost) per booking + Agency's fee per booking which is 100 USD.

Here we implemented 3 subqueries on 2 tables to apply the above conditions which calculates the revenue

Information about ORG structure, Commissions and Company revenue

Choose an option-

- Hierarchical structure of our organisation
- Know about all Agents' commissions
- Know about Supervisors' additional commissions
- Total Revenue of the company

Our total revenue is calculated as-- 20% (Transport cost + Hotel cost) per booking + Agency's fee per booking which is 100 usd.

	revenue
0	28451

```
if page_11 == 'Total Revenue of the company':  
    try:  
        "Our total revenue is calculated as-- 20% (Transport cost + Hotel cost) per booking + Agency's fee per booking which is 100 usd."  
        Var14=f"""select ((select sum(T1.Fare_in_usd)* 20/100 from Transport T1) + (select sum(H1.Price_in_usd) * 20/100 from Hotel H1)  
        + (select count(T1.Fare_in_usd) * 100 from Transport T1))  
        as Revenue;""";
```

PROJECT: EMPLOYEE SECTION

Based on bookings in our database, we retrieved (hotel name, room type) pairs with same room type. 2 pairs of tables are created and joined based on room type and name. Constraints like the first hotel should have the best rating and least price compared to the other one.

When an agent wants to suggest some hotel options to the customers, based on their preferences he/she can provide some realistic deals.

Some budget friendly options for your customer

Here is the comparison of some best deals our talented agents landed before-- We are showing a comparison between our various partner Hotels and their Room_type pairs, where first pair's rating higher than or equal to the other but the price is lower, hence making it as better deal for our customers.

	hotel1_name	room1_type	rating1	price1	hotel2_name	room2_type	rating2	price2
0	Four Seasons Hotel	Penthouse	8	900	JW Marriott	Penthouse	7	975
1	Marsa Malaz Kemp	Luxury suite	7	1050	JW Marriott	Luxury suite	6	1300
2	Marsa Malaz Kemp	Luxury suite	7	1050	Raddison Blu	Luxury suite	6	1250
3	Six Senses Kocatas	Luxury suite	8	1100	JW Marriott	Luxury suite	6	1300
4	Six Senses Kocatas	Luxury suite	8	1100	JW Marriott	Luxury suite	7	1350
5	Six Senses Kocatas	Luxury suite	8	1100	Raddison Blu	Luxury suite	6	1250
6	Shangri-La	Luxury suite	9	1200	Hotel Granduca	Luxury suite	8	1375

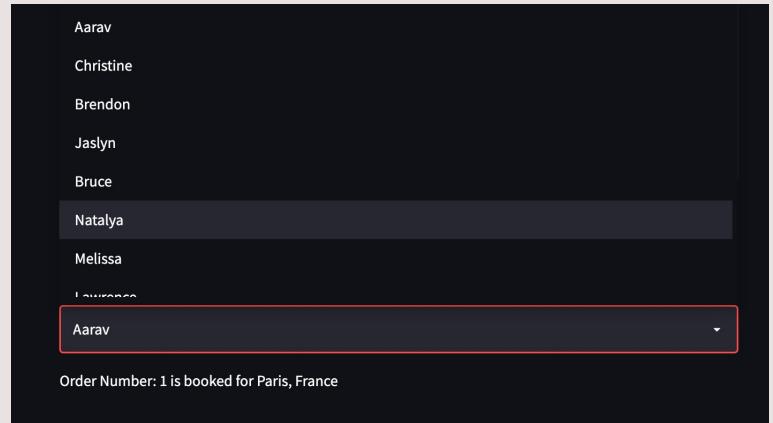
```
"Here is the comparison of some best deals our talented agents landed before-- We are showing a comparison between our various partner Hotels and their Room_type pairs, where first pair's rating higher than or equal to the other but the price is lower, hence making it as better deal for our customers."  
Var15=f"""  
select H1.Name as Hotel1_Name, H1.Room_type as Room1_type, H1.rating as Rating1,  
H1.Price_in_usd as Price1, H2.Name as Hotel2_Name, H2.Room_type as Room2_type, H2.Rating as Rating2, H2.Price_in_usd as Price2  
from Hotel H1, Hotel H2  
where H1.Room_type = H2.Room_type  
and H1.Name != H2.Name  
and H1.Rating > H2.Rating  
and H1.Price_in_usd < H2.Price_in_usd  
order by Price1;"""
```

PROJECT: EMPLOYEE SECTION

This select box shows the names of Agents who booked customer orders. It also displays the location along with its booking order id

The image shows the information about how this was created:

- 1) First the retrieval of agent names is done from Agent table
- 2) Then we incorporated that names information into another query below, where we retrieved order id, location city and country



```
## Agent Info based on their Names
a_names = "select Name from Agent_Works_with;"
try:
    agent_names = query_db(a_names)[“name”].tolist()
    agent_name = st.selectbox("Choose an Agent to see the booking they have worked on..", agent_names)
except Exception as e:
    st.write("Sorry! Something went wrong with your query, please try again.")
    st.write(e)

if agent_name:
    sql_q = f"""
        select TD.Travel_order_Order_id, TD.Location_city, TD.Location_country
        from Travel_order_consists_of_Trip_details TD, Makes_Travel_order MTO, Agent_Works_with WI
        where WI.Name = '{agent_name}' and TD.Travel_order_Order_id = MTO.Order_id and MTO.Agent_SSN = WI.SSN
        group by TD.Travel_order_Order_id, TD.Location_city, TD.Location_country
        order by TD.Travel_order_Order_id;"""

```

PROJECT: CUSTOMER SECTION

If the radio button as customer is chosen, then the information useful to customer is displayed.

First thing to notice would be 'signup form'. Through this form a customer can signup with the travel agency.

Here information about the customer is requested and directly stored in the Travel table.

Please select your role at KMisha

Are you an Employee or a Customer

Employee
 Customer

Name:

Contact Number:

Social Security Number:

SIGN UP



```
elif page1 == 'Customer':
    name=st.text_input('Name:')
    contact=st.text_input('Contact Number:')
    ssn= st.text_input('Social Security Number:')
    if st.button("SIGN UP"):

        Var200=f"INSERT INTO traveler_advise VALUES ('{ssn}', '{name}', '{contact}', '821318681');"
        Var300 = f"Select * from traveler_advise;"

        insert_db(Var200)
        df3 = query_db(Var300)
        #ax.text(color="b", ha="center", va="center", fontweight="bold", fontsize='25')
        st.write('Thank you for signing up with KMisha, your Information is safe with us. Our travel agent will get back to you shortly!')
```



PROJECT: CUSTOMER SECTION

Along with the signup form some information is also displayed on the customer section

Firstly, we display most booked destination based on year

Here we retrieved this information by joining two tables, grouping the required columns and ordering based on count of the country and year.

```
try:  
    Var3=f"""select TD.Location_country, MTO.Travel_year  
        from Makes_Travel_order MTO, Travel_order_consists_of_Trip_details TD  
        where MTO.Order_id = TD.Travel_order_Order_id  
        group by MTO.Travel_year, TD.Location_country  
        order by count(TD.Location_country), MTO.Travel_year desc;"""  
    df = query_db(Var3)
```

We would like to show you some of the most popular packages opted by our beloved customers

Explore the packages here..

- Most booked destinations by our customers each year
- World famous festivals which you can be a part of
- Our customers' top favourite Hotels in each country
- Looking for a road trip? Here are some customized plans made for our customers, we can make one for you as well!!

	location_country	travel_year
0	Czech Republic	2022
1	Italy	2022
2	China	2022
3	Taiwan	2022
4	China	2021
5	UAE	2021
6	Saudi Arabia	2021
7	Italy	2021
8	France	2020
9	Brazil	2020

PROJECT: CUSTOMER SECTION

Traveling for attending some world-famous festivals is one of the popular choice these days.

Information here is displayed based on retrieving festival name, country and city it is celebrated in, also the month of celebration. Here not null constraint is used on all the columns and ordered based on country.

- Explore the packages here..
- Most booked destinations by our customers each year
 - World famous festivals which you can be a part of
 - Our customers' top favourite Hotels in each country
 - Looking for a road trip? Here are some customized plans made for our customers, we can make one for you as well!!

	festival_name	country	city	festival_month
0	Sydney Gay and Lesbian Mardi Gras	Australia	Sydney	March
1	Carnival	Brazil	Rio de Janeiro	February
2	Cannes Film Festival	France	Paris	May
3	Oktoberfest	Germany	Munich	October
4	Diwali	India	Mumbai	November
5	Holi Festival	India	Kolkata	March
6	Pongal	India	Chennai	January
7	Saint Patrick Festival	Ireland	Dublin	March
8	Gion Matsuri	Japan	Tokyo	July
9	Dia De Los Muertos	Mexico	Mexico City	November

```
# page == 'World famous festivals which you can be a part of':  
try:  
    Var1="""select festival as Festival_name, country, city, festival_month  
    from Offers_Travel_plans  
    where festival is not null group by festival, country, city, Festival_month  
    order by Country;"""
```

PROJECT: CUSTOMER SECTION

Based on the previous booking information from database we displayed some popular hotels based on which country they are located in.

To get the result we grouped the name and country of the hotel from hotel table.

```
if page == 'Our customers\' top favourite Hotels in each country':
    try:
        Var4=f"select Name as Hotel_Name, Country from Hotel group by Name, Country;"
        df = query_db(Var4)
        st.dataframe(df)
    except Exception as e:
        st.write(
            "Sorry! Something went wrong with your query, please try again."
        )
        st.write(e)
```

We would like to show you some of the most popular packages opted by our beloved customers

Explore the packages here..

- Most booked destinations by our customers each year
- World famous festivals which you can be a part of
- Our customers' top favourite Hotels in each country
- Looking for a road trip? Here are some customized plans made for our customers, we can make one for you as well!!

	hotel_name	country
0	Marsa Malaz Kempinski The Pearl Doha	Saudi Arabia
1	Six Senses Kocata? Mansions	Turkey
2	The Drake Oak Brook	USA
3	Hotel Granduca	Thailand
4	Shangri-La	Czech Republic
5	Suiran Hotel	Japan
6	Marsa Malaz Kempinski The Pearl Doha	UAE
7	JW Marriott	Mexico
8	JW Marriott	Spain
9	Shangri-La	Ireland

PROJECT: CUSTOMER SECTION

Here are some of the customized travel plan options through road or Train

This was retrieved by adding constraint on transportation mode is Train or Road

We would like to show you some of the most popular packages opted by our beloved customers

Explore the packages here..

- Most booked destinations by our customers each year
- World famous festivals which you can be a part of
- Our customers' top favourite Hotels in each country
- Looking for a road trip? Here are some customized plans made for our customers, we can make one for you as well!!

	transp	travelling_from_country	travelling_from_city	travelling_to_country	travelling_to_city
0	Road	Germany	Germany	Munich	Berlin
1	Road	India	India	Kolkata	Chennai
2	Road	USA	USA	Las Vegas	Los Angeles
3	Train	Spain	Austria	Bunol	Vienna
4	Train	Ireland	Argentina	Dublin	Buenos Aires
5	Train	China	India	Shanghai	Chennai

```
if page == 'Looking for a road trip? Here are some customized plans made for our customers, we can make one for you as well!!':  
    try:  
        Var5=f'''select Transportation_mode, Travelling_from_country, Travelling_from_city, Travelling_to_country, Travelling_to_city  
        from Transport  
        where Transportation_mode = 'Train' or Transportation_mode = 'Road'  
        order by Transportation_mode;'''  
        df = query_db(Var5)
```



A decorative background featuring a light gray rectangular area with abstract teal-colored dashed wavy lines. There are two solid white shapes: a large, irregular shape on the left and a smaller, rounded shape at the bottom right.

THANK YOU