**Logical Data Model**

**1. User Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | User\_id | Long | It identifies a user uniquely. It is an autogenerated and primary key for the User table. |
|  | First\_name | VARCHAR(25) | It stores the first name of the user. |
|  | Last\_name | VARCHAR(25) | It stores the last name of the user. |
|  | Gender | VARCHAR(1) | It stores the gender of the user and only 2 values are possible. “M”- Male and “F”- Female |
|  | DOB | DATE | It stores the date of birth of the user. |
|  | Email | VARCHAR(40) | It stores the unique email address of the user. |
|  | Contact\_Number | VARCHAR(10) | It stores the phone number of the user. |
|  | Describe\_yourself | VARCHAR(250) | It stores the personal description about the user. |
|  | Address\_id | Long | It represents the address\_id from address table. |
|  | Review\_id | Long | It represents the review\_id from Review table. |
|  | Verification\_id | Long | It represents the verification\_id from Verification table. |
|  | Rating\_id | Long | It represents the rating of user/property. |
|  | School | Varchar(50) | It stores the school name of the user. |
|  | College | Varchar(50) | It stores the college name of the user. |
|  | Company | Varchar(50) | It stores the company name that user works in. |
|  | Emergency\_No | Varchar(10) | It stores the language of the user. |
|  | Password | Varchar(25) | It stores the password of the user. |
|  | Travel\_Credit | Long | It stores the Total Travel Credits available with user. |

**2. Address Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Address\_id | Long | It represents the primary |
|  | House No. | Varchar(10) | It represents the number that identify a house. |
|  | StreetName | Varchar(25) | It stores the name of the street. |
|  | ColonyName | Varchar(25) | It stores the name of the Colony. |
|  | AreaName | Varchar(25) | It store the name of the area. |
|  | City/Town | Varchar(25) | It stores the City/Town name. |
|  | Pincode | Varchar(6) | It stores the pin code of the address. |
|  | State | Varchar(25) | It stores the name of the state. |
|  | Country | Varchar(25) | It stores the name of the country. |

**3. Property Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Property\_id | Long | It stores the auto generated primary key that identifies a property uniquely. |
|  | Property\_name | Varchar(50) | It stores the name of the property, which is displayed as a name of property. |
|  | Description | Varchar(250) | It stores the description abou the property |
|  | House\_rules | Varchar(250) | It stores the rules for the house to stay. |
|  | Nightly\_price | Double | It stores the per night price of the property. |
|  | Accommodates | Integer | It stores the no. of people can stay inside the property. |
|  | Weekly\_discount | Integer | It stores the discount percentage, when any guest book the property for few weeks. |
|  | Monthly\_discount | Integer | It stores the discount in percentage, when any guest book the property for a month or more. |
|  | Add\_guest\_price | Double | It stores the per night price for additional guests. |
|  | Cleaning\_fee | Double | It stores the cleaning fee for the property for a stay |
|  | Address\_id | Long | It stores the address id for the property. |
|  | Amenities\_id | Long | It stores the amenities id for the property. |
|  | Property\_type | Varchar(1) | It stores the type of the property  0 – Apartment  1 – Private room  2 – Bed & Breakfast  4 – Villa  5 – Hotel |
|  | Direction | Varchar(200) | It stores the driving direction of the property. |
|  | No. of Rooms | Varchar(1) | It stores the no. of rooms in an Property (0-9) |
|  | Safety\_checklist\_id | Long | It stores the id of the Safety Table, |
|  | Status | Varchar(1) | It stores the status of the property.  0 – Inactive  1 – To be reviewed  2 – Active |
|  | Minimum\_nights | Varchar(1) | It stores the minimum no. of nights that a guest has to stay in property (0-9) |
|  | Review\_id | Long | It represents the Primary key of review table. |
|  | Rating\_id | Long | It stores the primary key of the Rating table. |
|  | User\_id | Long | It represents the id of the user property belongs to. |
|  | CheckIn\_Time | Time | It stores the check-in Time |
|  | CheckOut\_Time | Time | It stores the checkout time for the guest. |
|  | Instant Book | Varchar(1) | It stores the value of the variable for Instant booking. 0 – False and 1 – True . |
|  | Deposit | Double | It stores the deposit amount, which needs to be deposited. |
|  | Cancel\_Policy\_Id | Number(1) | It specifies the foreign key for the Cancelation Policy Table. |

**4. Image Table : -**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Image\_id | Long | It stores the id of the image (Primary Key) |
|  | Image\_name | Varchar(25) | It stores the name for the image. |
|  | User\_id | Long | It represents the foreign key (UserId) of the user table. |
|  | Property\_id | Long | It represents the foreign key(propertyId) of the Property table. |
|  | Verification\_id | Long | It represents the foreign key for the Verification table. |
|  | Image Type | Varchar(1) | It represents the type of the image stored.  0 – User  1 – Property  2 – Verification |
|  | Image\_Path | Varchar(100) | It stores the folder location of the image. |

**5. Verification Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Verification\_id | Long | It represents the autogenerated primary key to uniquely identify any image. |
|  | Contact\_Number | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Email | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Facebook | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Google | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | LinkedIn | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Twitter | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Passport | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Voter\_Id | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Adhar\_Card | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Pan\_Card | Varchar(1) | Status 0 represents pending & 1 represents verified. |
|  | Details | BLOB | It stores the verification data in an xml format, which can be parsed to display the information. |

**6. Review Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Review\_id | Long | It represents the autogenerated primary key to uniquely identify any review. |
|  | User\_id | Long | It stores the user\_id from the user table for the user, who has written the review. |
|  | Property\_id | Long | It stores the id from the Property table, for whom the review has been written. |
|  | Review | Varchar(200) | It contains the actual review. |
|  | Rating | Varchar(1) | It contains the rating provided by user (1-5) |
|  | Creation\_date | Date | It stores the creation date of the review. |

1. **Travel\_Credit\_Transaction Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Travel\_Credit\_Id | Long | It specify the primary key to identify the travel credit transactions |
|  | Scheme\_name | Varchar(25) | It species the scheme under which the travel credits are credited. |
|  | Travel\_Points | Long | It specifies the number of credits received for respective transaction. |
|  | Scheme\_id | Long | It specifies the primary key for Credit Scheme table. |
|  | User\_id | Long | It species the foreign key (user\_id) from the User table. |

1. **Visitors Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Visitor\_id | Long | It species the primary key to identify a visitor uniquely. |
|  | Visitor\_Name | Varchar(25) | It species the name of the visitor. |
|  | Identify\_Proof\_url | Varchar(200) | It species the url where identify proof is stored. |
|  | Contact\_number | Number(10) | It specifies the contact number for the Visitor table. |
|  | Booking\_id | Long | It species the booking\_id for the booking that visitor belong to. |
|  | Relationship | Varchar(20) | It specifies the relationship with Mainguest. |
|  | Gender | Varchar(1) | It species the gender of the visitor. |

1. **Transaction Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Transaction\_id | Long | primary key for the Transaction table.Identity of each transaction. |
|  | Transaction\_type | Number(2) | 0 = EMI transaction  1 = Credit Card transaction  2 = Debit Card transaction  3 = Cash Card transaction  4 = DreamHalt Points transaction |
|  | Transaction\_description | VARCHAR(25) | Description of transaction details sent by Payment Gateway.(credited timestamp, Cardsheme details, bank detail, currency detail) |
|  | Transaction\_total\_amount | Long | Total amount of Transaction occurred during a single payment action. |
|  | Transaction\_request\_amount | Long) | It stores the amount sent in request xml to third party from our application |
|  | Transaction\_credited\_amount | Long | Amount which has been credited to dreamhalt account. |
|  | Transaction\_3rdparty\_amount | Long | It stores the phone number of the user. |
|  | Transaction\_init\_time | Timestamp | Date and time of initialization of transaction in Payment Gateway. |
|  | Transaction\_credited\_time | Timestamp | Date and time of Completeness of transaction in Payment Gateway. |
|  | Transaction\_status | VARCHAR(20) | Trn\_Status\_0 : Transaction is complete and successful .  Trn\_Status\_1 : Transaction has been unsuccessful due to third party service unavailability or delay of the third part service response. |
|  | Risk\_Factor | Long | 0 = Genuine transaction  1 = Suspicious transaction  2 = Risky transaction  3 = Fraudulent transaction |
|  | Transaction\_Number | Varchar(50) | It stores the Transaction NNo sent by third Party. |
|  | Transaction\_bank\_name | Varchar(50) | Store bank name of the transaction |
| 15. | Transaction\_Currency | Varchar(50) | Store currency of the transaction type |
| 16. | Transaction\_branch\_address | Varchar(50) | Store branch location / address of the transaction took place. |

1. **Payment Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Payment\_id | Long | Unique identification of payment, primary key |
|  | User\_id | Varchar(50) | It specifies the user\_id of the Guest |
|  | Final Amount | Double | Total amount which is sent to third Party Payment Gateway for final deduction. |
|  | Miscellaneous amount | Double | Service tax + including third party client’s commision. |
|  | Discounted amount | Double | Amount deducted which is applied by some valid coupon code. |
|  | Actual\_property\_amount | Double | Original amount of the booking for the booking. |
|  | Applied\_dreamhalt\_points | Number | Dreamhalt points which is successfully applied by user before proceeding for payment |
|  | City | Varchar(40) | City of the user. |
|  | Country | Varchar(40) | Country of the user. |
|  | Payment\_time | Timestamp | Timestamp when customer click on the Payment button on Payment summary page. |
|  | Payment\_status | Number | 0 : Payment is confirmed and successful.  1 : Payment is initiated after just clicking on the Payment button in the Payment summary page.  2 : Payment is pending due to no response from third party transaction or delay of the response.  3 : Payment is partially done which means not the correct amount has been deducted from customer account but third party transaction response comes as successful.  4 : Payment is not successful, some error occurred in third party transaction and it comes as unsuccessful.  5 : Payment is going to be cancelled and a refund request is initiated.  6 : Payment cancellation is not successful which means some error occurred in third party refund transaction and refund is unsuccessful.  7 : Payment cancellation successful which means refund has been successful. |
|  | Payment\_type | Number | 0 = Regular Payment  1= Cancellation of Payment/Refund |
|  | Refund\_id | Long | Foreign key of the Refund Table |
|  | Applied\_coupon\_code | Varchar(20) | If any coupon code applied by customer regarding that payment. |
|  | Transaction\_id | Long | Foreign key of the Transaction Table |
| 17. | Booking\_category | Number | 0 = Advance booking  1 = Complete booking |
| 18. | IP\_Address | Varchar(20) | Ip\_address of the system from where payment is triggered. |
| 19. | Payment\_currency | Varchar(20) | Currency written along with the residence list. |
| 20. | Property\_id | Long | It specifies the property involved for this payment. |

1. **Booking Table :-**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.no. | Column Name | | | Data type | | Description | |
| 1 | | Booking\_id | Long | | It stores the auto generated primary key that identifies a Booking uniquely. | |
|  | | Booking\_type | Number | | 0 = Advance Booking  1= Complete Booking   1. = Cancel Booking | |
|  | | Booking\_status | Number | | 0 : Booking confirmed and running which means yet to travel  1 : Booking is closed which means travel completed successfully.  2 : Booking is with error and not confirmed which means there is some error in payment of the same.  3 : Booking is pending which means booking is initiated and payment is done but there is some delay in getting the response from third party service.  4 : Booking cancellation initiated.  5 : Booking cancellation complete and successful.  6 : Booking cancellation is pending for the delay response from the third party.  7 : Booking cancellation is unsuccessful due to the error in the payment and third party transaction.  8 : Booking confirmed but host detected as suspicious.  9 : Booking confirmed but guest detected as suspicious.  10 : Others | |
|  | | Property\_id | Long | | Foreign key of the Property Table | |
|  | | Payment\_id | Long | | Foreign key of the Payment Table | |
|  | | No\_of\_persons | Number | | Total number of persons going to be booked | |
|  | | Special\_demands | Varchar(20) | | Any extra demands raised by Customers. | |
|  | | Food\_Preference | Number | | 0 = vegeterian  1 = non-vegeterian  2 = ege-terian | |
|  | | Refund\_id | Long | | Foreign key of the Refund Table | |
|  | | Booking\_description | Varchar(20) | | Description of the booking. | |
|  | | Booking\_init\_date | Timestamp | | Timestamp of booking initiated | |
|  | | Stay\_date\_from | Timestamp | | date from when customer will stay | |
|  | | Stay\_date\_to | Timestamp | | Till date customer will stay | |
|  | | No\_of\_rooms\_book | Number | | Total no of rooms booked by the user. | |
|  | | Booking\_init\_date | Timestamp | | Timestamp of booking confirmed. | |
|  | | User\_id | Long | | It specifies the Guest user Id from the User table. | |

1. **Refund Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Refund\_id | Long | It stores the auto generated primary key that identifies an Refund uniquely. |
|  | Refund\_amount | Double | Total amount going to refund |
|  | Refund\_description | Varchar(200) | Refund description |
|  | Cancellation\_reason | Varchar(100) | Reason of cancellation |
|  | Refund\_sms | Varchar(100) | Sms send to the user about refund confirmation. |
|  | Refund\_status | Number | Same as Booking status |
|  | Refund\_by | Varchar(100) | Name of the user who did Refund action |
|  | Refund\_by\_email | Varchar(100) | Email Id of the user who did Refund action |
|  | Currency | Varchar(10) | Currency used in Booking |

1. **Cancellation\_Rules\_Table**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Cancellation\_Rules\_id | Number(1) | It stores the rule id and act as a primary key.  1 – Flexible  2 – Moderate  3 – Strict |
|  | Rule Description | Varchar(250) | It specifies the description about the application of the rule. |
|  | Refund\_percentage | Varchar(5) | It species the Refund percentage applied on Cancellation. |
|  | Rule\_Name | Varchar(20) | It species the name of the rule.(Flexible, Moderate, Strict) |

1. **Event Table :-**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no. | Column Name | Data type | Description |
|  | Event\_id | Long | It stores the auto generated primary key that identifies an Event uniquely. |
|  | Event\_Description | Varchar(200) | Description of the Event, going to be updated on action by action. |
|  | Booking\_id | Long | Foreign key of the Booking Table |
|  | Payment\_id | Long | Foreign key of the Payment Table |
|  | Transaction\_id | Long | Foreign key of the Transaction Table |
|  | Event\_start\_date |  | Initialization date of the booking. |
| 7. | Event\_status | Varchar(20) | * Status\_000 : If Payment is successful, Transaction is successful and then booking is also successful(which is real time positive scenario). * Status\_001 : If Payment is successful, Transaction is successful but booking is not successful.(which should not happen, it’s an exceptional scenario). * Status\_010 : If Payment is successful, Transaction is not successful and then booking is successful(which should not also happen, it’s an exceptional scenario). * Status\_011 : If Payment is \_successful, Transaction is not successful and then booking is also not successful.(which should not also happen, it’s an exceptional scenario). * Status\_111 : If Payment is not successful, Transaction is not successful and then booking is not also successful.(which is real time positive scenario). * Status\_110 : If Payment is not successful, Transaction is not successful but booking is successful.(which should not also happen, it’s an exceptional scenario). * Status\_100 : If Payment is not successful, Transaction is successful and then booking is successful.(which should not also happen, it’s an exceptional scenario). * Status\_101 : If Payment is not successful, Transaction is successful and then booking is not successful.(which should not also happen, it’s an exceptional scenario). |
| 8. | Property\_id | Long | Foreign key of the Property Table |
| 9. | User\_id | Long | Foreign key of the User Table. |
| 10 | Event\_PNR\_No | Long | Unique booking confirmation number. |
| 11. | Stay\_Pass\_ticket | Blob | Ticket of confirmation of the booking. |
| 12. | SMS | Varchar(200) | Description Message sent to booker’s mail id and contact no. |