



**Project Title:**



# **TRIPADVISOR E-MANAGEMENT**

**College Name: MAILAM ENGINEERING COLLEGE**

**Code: 4216**

**Department of Computer Science and Business Systems**

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## **TripAdvisor E-Management**

### **Hardware Required:**

- System with advance configuration

### **Software Required:**

- Salesforce Platform

### **System Required:**

- Good Configuration
- The TripAdvisor E-Management app with the salesforce works with your all-in-one travel companion, empowering you to plan, book, and make the most of the trips. Discover millions of reviews and insights shared by fellow travelers, helping you make informed decisions for every aspect of your journey. Whether you're seeking the perfect hotel, top-rated restaurants, must-visit attractions, or the best travel deals, TripAdvisor has you covered.
- **Acceptance Criteria & Solution**
- As the Salesforce User we have to manage the data for the Hotels, Flights, and Food Options for this we have to create some automation for simplification.
- To ensure that when a new Food Option is added or updated, the corresponding Hotel's information is
-



- 
- updated

accordingly. For example, you might want to maintain a total count of food options for each hotel.

Also there is automation for the customer benefits if the there buying amount is with respect to some amount then they will get some discounts on their bill

- For the flights there schedule process being involved where the customer who has booked the flight will get the reminder mail alert for knowing proper timing of the flight before 24 hrs it's important to manage the in a good way.
- The system should provide confirmation or notification to the user upon successful sending of the email.
- Solution: For the Above requirements of TripAdvisor we have created the solutions by creating the custom objects and Fields the Custom Objects that are created are Hotels, Food Options, Customer & Flights. For the Automation we have used here a

flow and triggers and for scheduling the email alerts



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have created the Apex Schedulable class so email alerts will be created.

- **Create Object**
- Hotel Object is created to ensure that when a new Food Option is added or updated with the necessary information
- Enter label : Hotel
- Plural Name : Hotels
- Data Type : (text)
- Field Name : Hotel Name
- Click Allow Reports
- Allow Search ? Save
- With Above References Create following Object
- Food Option ? Data Type ? Auto Number ?  
Format? FO - {0000}
- Flight ? Data Type ? Auto Number ? Format? FL-  
{0000}



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- Customer ?Text ? Field  
Name ? Customer  
Name



### Create Fields for Hotel Object

Sr. No.	Field Name	Data Type
1	TotalFoodOptions	Number
2	Date	Date

### Create Fields For Food Option

Sr. No.	Field Name	Data Type
1	Name	Text
2	Hotel	Hotel(Lookup)
3	Food Amount	Currency

### Create Fields in the Flight Object

Sr. No.	Field Name	Data Type
1	Name	Date/Time
2	DepartureDateTime	Hotel(Lookup)

## Create Fields in the Customer Object



Sr. No.	Field Name	Data Type
1	Customer Name	Name
2	Discount Amount	Formula (Currency)
3	Discount Percent	Percentage

## Create Flow

Create the Flow for the discount for customer when the Amount is greater than 3000 some Amount of Discounts will be there if the Amount is between 1500 to 3000 so Some Amount of Discount will be there for them

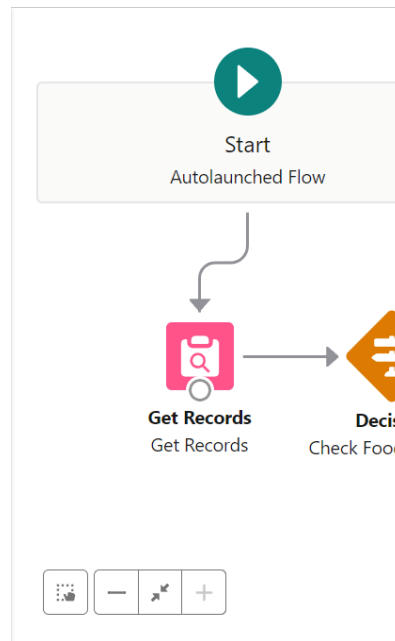
## Flow Procedure

### Create 3 variable :

Variable > Api name > foId > text > Available for Input

Variable > Api name > csId > text > Available for Input

Variable > Api name > discount > Number



## Flow Steps :Get Records

Edit Get Records

Find Salesforce records and store their field values in flow variables.

**Get Food options** (Get\_Food\_options)

Get Records of This Object

\* Object

Food Option

Filter Food Option Records

Condition Requirements

All Conditions Are Met (AND) ▼

Cancel

Done

## 2. Decision Element: Create 2 Outcomes



### Edit Decision

OUTCOME ORDER 1 +

OUTCOME DETAILS Delete

Full Discount

Partial Discount

No Discount

\*Label

Full Discount

\*Outcome API Name

Full\_Discount

Condition Requirements to Execute Outcome

All Conditions Are Met (AND) ▼

Resource

Food Option from Get\_Food\_options > Food... ×

Operator

Greater Than ▼

Value

3000

+ Add Condition

Cancel

Take the 3 Assignments > Full Discount, Partial Discount & No Discount

### Edit Assignment

**Full Discount** (Full\_Discounts) ✎

**Set Variable Values**  
Each variable is modified by the operator and value combination.

Variable

# discount ×

Operator

Equals ▼

Value

20 🗑

+ Add Assignment

Cancel Done





### Partial Discount (Partial\_Discounts\_



#### Set Variable Values

Each variable is modified by the operator and value

Variable

# discount X

+ Add Assignment

### Edit Assignment

#### Edit Assignment

### No Discount (No\_Discount)

#### Set Variable Values

Each variable is modified by the operator and value combination.

Variable

# discount X

Operator

Equals

Value

0



+ Add Assignment

Cancel

Done

### Update Record Element

#### Edit Update Records

#### \* How to Find Records to Update and Set Their Values

- ☐ Use the IDs and all field values from a record or record collection
- ☒ Specify conditions to identify records, and set fields individually

#### Update Records of This Object Type

\* Object

Customer

#### Filter Customer Records

Condition Requirements to Update Records

All Conditions Are Met (AND)

Cancel

Done



Edit Update Records

All Conditions Are Met (AND)

Field

Id

Operator

Equals

Value

Aa csld ×

+ Add Condition

Set Field Values for the Customer Records

Field

Discount\_Percent\_\_c

Value

# discount ×

+ Add Field

Cancel

## Apex Triggers

Scenario: In the Hotel you have to ensure that when a new Food Option is added or updated, the corresponding Hotel's information is updated accordingly. For example,

you might want to maintain a total count of food options for each hotel. To manage the things properly with perspective to the Hotel things should be clearly manageable for making the food options available with respect to hotels

## Apex trigger With Handler

Apex Trigger With Handler

```
public class FoodOptionTriggerHandler {
    // Method to update hotel information based on food options
    public static void updateHotelInformation(List<Food_Option__c>newFoodOptions,
List<Food_Option__c>oldFoodOptions, TriggerOperation operation) {
        Set<Id>hotelIdsToUpdate = new Set<Id>();

        // Collect unique Hotel Ids affected by food options changes
        for (Food_Option__c foodOption : newFoodOptions) {
```



```

        hotelIdsToUpdate.add(foodOption.Hotel__c);
    }

    // Update hotel information based on food options
    List<Hotel__c> hotelsToUpdate = [SELECT Id, Name, TotalFoodOptions__c FROM Hotel__c
    WHERE Id IN :hotelIdsToUpdate];

    for (Hotel__c hotel : hotelsToUpdate) {
        // Recalculate total food options count
        Integer totalFoodOptions = [SELECT COUNT() FROM Food_Option__c WHERE Hotel__c =
        :hotel.Id];
        hotel.TotalFoodOptions__c = totalFoodOptions;
    }

    // Update hotels with new total food options count
    update hotelsToUpdate;
}

}

```

```

1 public class FoodOptionTriggerHandler {
2     // Method to update hotel information based on food options
3     public static void updateHotelInformation(List<Food_Option__c> newFoodOptions, List<Food_Option__c> oldFoodOptions, TriggerOperation operation) {
4         Set<Id> hotelIdsToUpdate = new Set<Id>();
5
6         // Collect unique Hotel Ids affected by food options changes
7         for (Food_Option__c foodOption : newFoodOptions) {
8             hotelIdsToUpdate.add(foodOption.Hotel__c);
9         }
10
11         // Update hotel information based on food options
12         List<Hotel__c> hotelsToUpdate = [SELECT Id, Name, TotalFoodOptions__c FROM Hotel__c WHERE Id IN :hotelIdsToUpdate];
13
14         for (Hotel__c hotel : hotelsToUpdate) {
15             // Recalculate total food options count
16             Integer totalFoodOptions = [SELECT COUNT() FROM Food_Option__c WHERE Hotel__c = :hotel.Id];
17             hotel.TotalFoodOptions__c = totalFoodOptions;
18         }
19
20         // Update hotels with new total food options count
21         update hotelsToUpdate;
22     }
23
24
25 }

```

Trigger



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```
trigger FoodOptionTrigger on Food_Option__c (after insert, after update, after delete) {  
    If(trigger.isInsert&&trigger.isAfter){  
        FoodOptionTriggerHandler.updateHotelInformation(trigger.new);  
    }  
}
```

```
1 trigger FoodOptionTrigger on Food_Option__c (after insert, after update, after delete) {  
2     If(trigger.isInsert && trigger.isAfter){  
3         FoodOptionTriggerHandler.updateHotelInformation(trigger.new);  
4     }  
5 }  
6
```

- **Apex Schedule**
- Create the Reminder mail for the customer who has booked the flight according to that booking set the Apex schedule so mail will be sent prior to 24hrs.
- Note: Please create the required field for Scheduled Apex Code

### **Apex Schedule Class Solution**

- public class FlightReminderScheduledJob implements Schedulable {
  - public void execute(SchedulableContextsc) {
  - sendFlightReminders();



- }
- private void sendFlightReminders() {
- // Query for flights departing within the next 24 hours
- List<Flight\_\_c>upcomingFlights = [SELECT Id, Name, DepartureDateTime\_\_c FROM Flight\_\_c
- WHERE
- DepartureDateTime\_\_c >= :DateTime.now()
- AND DepartureDateTime\_\_c <= :DateTime.now().addDays(1)];
- for (Flight\_\_cflight :upcomingFlights) {
- // Customize the logic to send reminder emails
- // For this example, we'll print a log message; replace this with your email sending logic.
- System.debug('Sending reminder email for Flight ' + flight.Name + ' to ' + flight.ContactEmail\_\_c);
- }



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- // Example: Send email using Messaging.SingleEmailMessage
- Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
- email.setToAddresses(new List<String>{ flight.ContactEmail\_\_c });
- email.setSubject('Flight Reminder: ' + flight.Name);
- email.setPlainTextBody('This is a reminder for your upcoming flight ' + flight.Name + ' departing on ' + flight.DepartureDateTime\_\_c);
- 
- Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{ email });
- }
- }
- }
- 
-



```
FlightReminderScheduledJob.apex
Code Coverage: None | API Version: 59
1 public class FlightReminder
2
3     public void execute(Sch
4         sendFlightReminders
5     }
6
7     private void sendFlight
8         // Query for flight
9     List<Flight_c> upc
10
11
12
13     for (Flight_c flig
14         // Customize th
15         // For this exam
16         System.debug('S
17
18         // Example: Send
19         Messaging.Singl
20         email.setToAddr
21         email.setSubjec
22         email.setPlainT
23
24         Messaging.sendE
25     }
26 }
27 }
```



- The FlightReminderScheduledJob class implements the Schedulable interface, and the execute method is where you put the logic to send reminder emails.
- 
- 
- The sendFlightReminders method queries for flights departing within the next 24 hours. You can customize the query based on your specific requirements.



- Create the Apex code in an anonymous Window to execute the Apex Code
  - // Schedule the job to run every day at a specific time (e.g., 6 AM)
- String cronExp = '0 0 6 \* \* ?';
- System.schedule('FlightReminderJob', cronExp, new FlightReminderScheduledJob());
- 

A screenshot of the 'Enter Apex Code' window in Salesforce. The window has a title bar with 'Enter Apex Code' and standard window controls. The code area contains four lines of Apex code:

```
1 // Schedule the job to run every day at a specific time (e.g., 6 AM)
2 String cronExp = '0 0 6 * * ?';
3 System.schedule('FlightReminderJob', cronExp, new FlightReminderScheduledJob());
4
```

The code is syntax-highlighted. At the bottom of the window, there are three buttons: 'Open Log' (with a checkmark icon), 'Execute', and 'Execute Highlighted'.

- Conclusion: We have Created this Customization process for the proper flow of the business if TripAdvisor where they can easily access the Hotel requirement then food options and also the ease for the customers with the preferable





discount with there  
Amount limits this  
process helps to  
save time from multiple manual processes.

