**Project:** In-vehicle coupon recommendation

**Source:**

**https://www.kaggle.com/datasets/mathurinache/invehicle-coupon-recommendation**

**Data Set Information:**

This data was collected via a survey on Amazon Mechanical Turk. The survey describes different driving scenarios including the destination, current time, weather, passenger, etc., and then asks the person whether he will accept the coupon if he is the driver.

**Attribute Information:**

*Nominal*: Destination, Passenger, Weather, Coupon, Marital Status, Education, Occupation, Income, Bar, Coffee House, Restaurant Less than 20, Time, Restaurant 20 to 50.

*Binary* : Gender, Has Children, To Coupon 5 mins, To Coupon 15min, To Coupon 25 mins, Direction Same, Direction Opp.

*Numerical :* Temperature, Expiration, Age.

*destination*: No Urgent Place, Home, Work - Nominal  
*passanger:* Alone, Friend(s), Kid(s), Partner (who are the passengers in the car)   
*weather:* Sunny, Rainy, Snowy  
temperature:55, 80, 30  
*time*: 2PM, 10AM, 6PM, 7AM, 10PM  
*coupon*: Restaurant(<$20), Coffee House, Carry out & Take away, Bar, Restaurant($20-$50)  
*expiration*: 1d, 2h (the coupon expires in 1 day or in 2 hours)  
*gender*: Female, Male  
*age*: 21, 46, 26, 31, 41, 50plus, 36, below21  
*maritalStatus*: Unmarried partner, Single, Married partner, Divorced, Widowed  
*has*\_*Children*: 1, 0  
*education*: Some college - no degree, Bachelor's degree, Associates degree, High School Graduate, Graduate degree (Masters or Doctorate), Some High School  
*occupation*: Profession, Student, Type of job and working Industury

*income*: $37500 - $49999, $62500 - $74999, $12500 - $24999, $75000 - $87499,  
$50000 - $62499, $25000 - $37499, $100000 or More, $87500 - $99999, Less than $12500  
*Bar*: never, less1, 1~3, gt8, nan4~8 (feature meaning: how many times do you go to a bar every month?)  
*CoffeeHouse*: never, less1, 4~8, 1~3, gt8, nan (feature meaning: how many times do you go to a coffeehouse every month?)  
*CarryAway*: n4~8, 1~3, gt8, less1, never (feature meaning: how many times do you get take-away food every month?)  
*RestaurantLessThan20*: 4~8, 1~3, less1, gt8, never (feature meaning: how many times do you go to a restaurant with an average expense per person of less than $20 every month?)  
*Restaurant20To50*: 1~3, less1, never, gt8, 4~8, nan (feature meaning: how many times do you go to a restaurant with average expense per person of $20 - $50 every month?)  
*toCoupon*\_*GEQ15min*: 0,1 (feature meaning: driving distance to the restaurant/bar for using the coupon is greater than 15 minutes)  
*toCoupon*\_*GEQ25min*: 0, 1 (feature meaning: driving distance to the restaurant/bar for using the coupon is greater than 25 minutes)  
*direction*\_*same*: 0, 1 (feature meaning: whether the restaurant/bar is in the same direction as your current destination)  
*direction*\_*opp*: 1, 0 (feature meaning: whether the restaurant/bar is in the same direction as your current destination)  
*Y:* 1, 0 (whether the coupon is accepted)

Target Variable:

Binary - Whether the coupon is accepted or not (Yes/No or 1 / 0)

*Reason:* Based on multiple scenarios, if a coupon is offered at a drive thru person, will the person accept it or not. Here, the variables are a mix of nominal and binary.