



Churn Prediction – Data Description

Data description

- Customer churn is the process of customers switching from one service provider to another
- ‘Chit-Chat’, a telecommunications company is concerned about the number of customers leaving their service
- Over a period, they have recorded a lot of data about the customers including –
 - Demographic information
 - Account information
 - Services that each customer has signed up for (Phone, Internet, and other allied services)
- They have also recorded if a customer has churned out or not within the last month

Variable description

Total size: 257 x 21

Data file : churn.csv

| Variables (in order as in dataset) | Description | Categories |
|---|---|---|
| customerID | The customer IDs of the 'Chit-Chat' customers | 0115-TFERT and 249 more |
| gender | Gender of the customer | Female, Male |
| SeniorCitizen | Whether the customer is a senior citizen or not | 0- not a senior citizen; 1- senior citizen |
| Partner | Whether the customer is signed up for partner services or not | Yes, No |
| Dependents | | Yes or No |

Variable description

Total size: 257 x 21

Data file : churn.csv

| Variables | Description | |
|------------------|---|---|
| tenure | Number of months since they enrolled for the service | - |
| Contract | The type of contact opted by the customer | Month-to-month, One year or Two year |
| PaperlessBilling | Whether the customer has opted for paperless billing or not | Yes, No |
| PaymentMethod | Payment method opted by the customer | Bank transfer, Credit card, Electronic check, Mailed check |
| MonthlyCharges | Monthly charge paid by the customer for the services he/she has signed up for | - |
| TotalCharges | Total charge paid by the customer for the services he/she has signed up for | - |

Variable description

Total size: 257 x 21

Data file : churn.csv

| Variables | Description |
|------------------|--|
| PhoneService | Yes or No |
| MultipleLines | Yes, No or No phone service |
| InternetService | DSL, Fiber optic or No internet service |
| OnlineSecurity | Yes, No or No internet service |
| OnlineBackup | Yes, No or No internet service |
| DeviceProtection | Yes, No or No internet service |
| TechSupport | Yes, No or No internet service |
| StreamingTV | Yes, No or No internet service |
| StreamingMovies | Yes, No or No internet service |
| Churn | Whether the customer has churned out of the service or not |


```
        operation == "MIRROR_X":  
            mirror_mod.use_x = True  
            mirror_mod.use_y = False  
            mirror_mod.use_z = False  
        operation == "MIRROR_Y":  
            mirror_mod.use_x = False  
            mirror_mod.use_y = True  
            mirror_mod.use_z = False  
        operation == "MIRROR_Z":  
            mirror_mod.use_x = False  
            mirror_mod.use_y = False  
            mirror_mod.use_z = True  
  
        #selection at the end -add  
        mirror_ob.select= 1  
        modifier_ob.select=1  
        context.scene.objects.active  
        one = bpy.context.selected_objects[0]  
        data.objects[one.name].select  
        print("please select exactly one mirror")
```

THANK YOU