# States and Patterns

In this document the paths and patterns will be designed , which will generate the data. This data will simulate the journey of customers on flight ticket websites. The journeys could pass the next several stages:

**States**

S1 : Start  
S2 : Ticket Website  
S3 : Select Flight  
S4 : Pay Flight  
S5 : Cross/Up-sell  
S6 : Trip  
S7 : Issue  
S8 : End

The Frequency of the stages is shown in the state activity diagram. In the various stages the follow datatypes will be saved.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Start S1 | S2 | S3 | S4 | S5 | S6 | S7 | End S8 |
|  | ID Channel Site Experience | ID Price | ID Channel CES | ID Price CES | ID NPS CES | ID Issue NPS |  |

The datatypes:

**Datatypes**

ID : INT  
State : STRING (‘s1’,’s2’,’s3’,’s4’,’s5’,’s6’,’s7’,’s8’)  
CHANNEL : INT (0(laptop),1(mobile),2(PC),3(phone))  
Price : INT (1 - 4000)  
Site Experience : INT (1 – 10)  
CES : INT (1 – 10)  
NPS : INT (1 – 10)  
Issue : STRING (‘solved’, ‘not solved’)

The next patterns will be promoted:

**Score preferences**

*if the person has a company:*

NPS -= 1  
CES += 2   
Site Experience += 1  
Price between 1000 and 4000

*if the person is a female:*

NPS += 2   
CES += 1   
Site Experience += 1

*If the person uses laptop*:

NPS += 1   
CES += 2   
Site Experience += 1

*If the person uses mobile:*

CES -= 2

*If the issue is solved* :

NPS += 2   
CES += 1

*If the issue in not solved:*

NPS -= 3   
CES -= 1

*If the person is loyal:*

NPS += 4  
CES += 4  
Site Experience += 4

