1. multi-intent/ multi-class classification is used when you have more than one class or category.

example: Show me pink Audi convertibles

text class 1 class 2 class 3

Show me pink Audi convertibles vehicle\_color\_pink vehicle\_model\_audi vehicle\_type\_convertible

For more accuracy we didn't use this feature. we used multiple classifers instead of multiple classes/intents.

We trained one classifier for the primary category. Then we trained 8 classifiers for the secondary categories.

1. Primary classes
   1. 16 primary category names good:

- service recovery - 48412

- catering - 26989

///////// below 8 classes are the ones we used in training. They were chosen because they had enough usable data. And the number of records are close

- cabin crew - 9800

- airport - 7542

- medical - 6827

- product development - 6284

- duty free - 4307

- security - 3708

- safetly - 3543

- emirates skywards - 2121

//////////////////////////////

- kis/mod - 1890

- aircraft development - 617

- pax comms - 345

- crew rest inflight - 312

- ships library - 284

- survey forms - 186

* 1. 4 primary category names bad:

- transport - 155

- manuals - 91

- training department - 62

1. Secondary classes
   1. **secondary used (total 73):**

**cabin crew (8):**

**Compliments 6197**

**Hotel Feedback 445**

**Image 806**

**Payroll adjustments 878**

**VCM 287**

**Complaints 1140**

Fitness 31

Peer Support 16

**Airport(2):**

**Dubai 4144**

**Outstation 3398**

**Medical(5):**

**Passenger 5512**

HRK 52

**EMK/FAK/SEMK/UPK 248**

**Crew 937**

EquipmentFault 78

**product development (8):**

**YC Prod / Service 2665**

**JC Prod / Service 2681**

**FC Prod / Service 448**

JC SSQ Errors 44

**Ground to Pur Msgs 295**

YC SSQ Errors 66

PA issues 71

FC SSQ Errors 14

**duty free(9):**

**Duty Free Items 2028**

**Equipment 954**

**Seals 638**

**DF Done Nil Sales 202**

**Duty Free Targets 123**

**DF not done 180**

Special Offers 90

Paper Work 90

NO SUB CLASS 2

**security(17):**

Suspicious Items 26

**Security Search 666**

**Disruptive/ Non 634**

**Disruptive/ Alcohol 779**

**General 878**

Confidential Issues 37

**Precious Cargo 184**

Hotel Security 46

Airport 99

Theft 143

**Suspicious Behaviour 136**

Audits 14

Fraud 15

Passenger Load Error 28

Passports 21

Bomb Threat 1

Arms/ Weapons 1

**safety(21):**

**Passenger Behaviour 1735**

**Crew Procedures 607**

Communication 57

Smoke 61

**Smoking 228**

**Smoke Detectors 138**

**Cabin Management 202**

Smoking 40

Weather 25

**Technical 151**

**Ground Operations 108**

Unidentified Noise 12

Fumes 51

Doors 62

Fire 4

Emergency Equipment 36

Diversions 13

Vibration 6

Fire Extinguisher 5

Declared Emergency 1

Door Checker 1

**emirates skyward (3):**

**Transactions 738**

**IO customers 476**

**Product Feedback 907**

* 1. **Secondary not used (35):**

**aircraft development (5)**

**Systems (non 330**

Lavatory 44

**Galley 187**

Shower Spa 20

Lounge 36

**catering(2):**

**Loading 6501**

**Food 20488**

**crew rest inflight(7):**

Extended 70

CRC 42

Soft Blocked Seats 53

Disturbed 43

Rest Strategies 59

Reduced 31

Curtains/Hardblocked 14

**kis/mod(2):**

**KIS Application 1606**

**Printer 284**

**manuals(3)**

Station Information 38

Policies 38

Service Manual 15

**pax comms(3)**

**Business Class 148**

First Class 73

**Economy Class 124**

**service recovery (4)**

**Business Class 15677**

**Economy Class 25493**

**First Class 7242**

NO SUB CLASS 1

**ships library(1):**

**OME Braille W.Stmt 284**

**survey forms(1)**

**NO SUB CLASS 186**

**training department(5)**

Image and Uniform 27

Service 24

Safety 6

Security 3

Duty Free 2

**transfort(2)**

**Outstation 106**

Base (Dubai) 49

1. please review manually:
   1. primary:

airport

cabin crew

product development

duty free

emirates skywards

safety

security

medical

* 1. secondary:

Dubai

YC SSQ Errors

Passenger Behaviour

Product Feedback

JC SSQ Errors

Ground to Pur Msgs

Complaints

Compliments

Outstation

|  |  |
| --- | --- |
| **DF Done Nil Sales** | **202** |
| **Duty Free Targets** | **123** |
| **DF not done** | **180** |
| **Security Search** | **666** |
| **Disruptive/ Non** | **634** |
| **Disruptive/ Alcohol** | **779** |
| **General** | **878** |
| **Precious Cargo** | **184** |
| **Suspicious Behaviour** | **136** |
| **Passenger Behaviour** | **1735** |
| **Crew Procedures** | **607** |
| **Smoking** | **228** |
| **Smoke Detectors** | **138** |
| **Cabin Management** | **202** |
| **Technical** | **151** |
| **Ground Operations** | **108** |
| **Transactions** | **738** |
| **IO customers** | **476** |
| **Product Feedback** | **907** |
| **DF Done Nil Sales** | **202** |
| **Duty Free Targets** | **123** |