

# Développement d'une application LUIS

1



- Entraîner et déployer un modèle LUIS

## Environnement de travail



git



GitHub



Langage Understanding

# Les dialogues

**user** : I'd like to book a trip to Atlantis from Caprica on Saturday, August 13, 2016 for 8 adults. I have a tight budget of 1700.

**wizard** : Hi...I checked a few options for you, and unfortunately, we do not currently have any trips that meet this criteria. Would you like to book an alternate travel option?

**user** : Yes, how about going to Neverland from Caprica on August 13, 2016 for 5 adults. For this trip, my budget would be 1900.

**wizard** : I checked the availability for this date and there were no trips available. Would you like to select some alternate dates?

**user** : I have no flexibility for dates... but I can leave from Atlantis rather than Caprica. How about that?

**wizard** : I checked the availability for that date and there were no trips available. Would you like to select some alternate dates?

**user** : I suppose I'll speak with my husband to see if we can choose other dates, and then I'll come back to you. Thanks for your help

```
{'user_id': 'U22HTHYNP', 'turns': [{'text': "I'd like to book a trip to Atlantis from Caprica on Saturday, August 13, 2016 for 8 adults. I have a tight budget of 1700.", 'labels': {'acts': [{'args': [{'val': 'book', 'key': 'intent'}], 'name': 'inform'}, {'args': [{'val': 'Atlantis', 'key': 'dst_city'}, {'val': 'Caprica', 'key': 'or_city'}, {'val': 'Saturday, August 13, 2016', 'key': 'str_date'}, {'val': '8', 'key': 'n_adults'}, {'val': '1700', 'key': 'budget'}], 'name': 'inform'}]}
```

**Author**

**Text**

**Labels** : intent & entities

```
[ { "args": [ { "val": "book", "key": "intent" } ], "name":
"inform" }, { "args": [ { "val": "Atlantis", "key": "dst_city" }, {
"val": "Caprica", "key": "or_city" }, { "val": "Saturday,
August 13, 2016", "key": "str_date" }, { "val": "8", "key":
"n_adults" }, { "val": "1700", "key": "budget" } ], "name":
"inform" } ]
```

Intent : book , None

Entités :

**or\_city** : ville d'origine

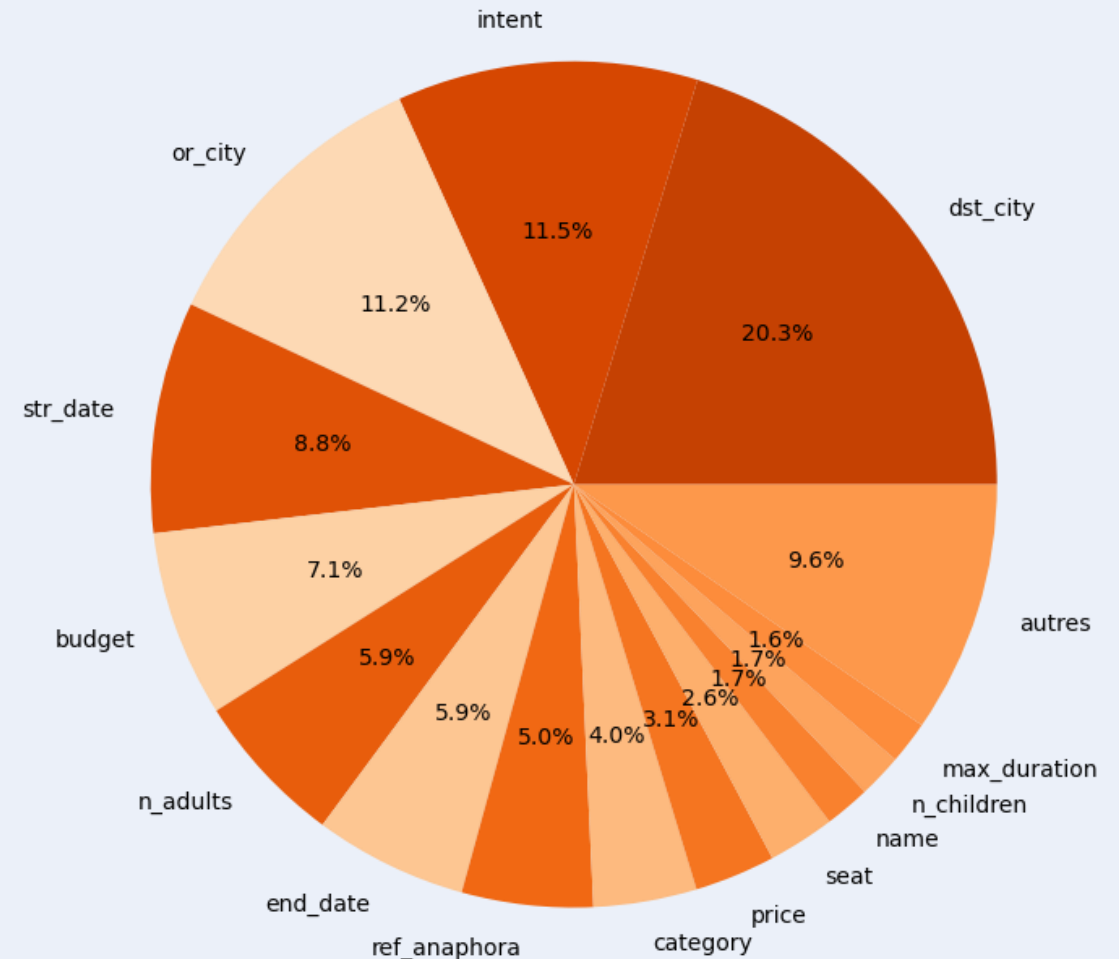
**dst\_city** : ville de destination

**str\_date** : date de départ

**end\_date** : date de retour

**budget** : budget du voyage

Répartition des 15 étiquettes les plus répandues dans les dialogues

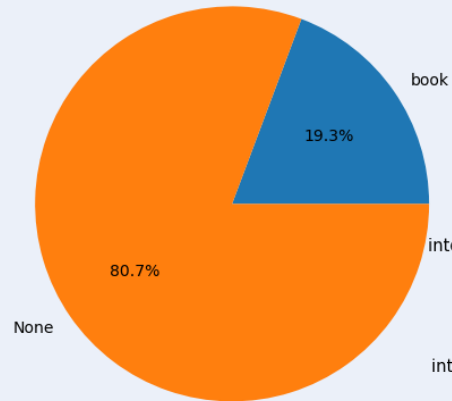


# Notre modèle LUIS

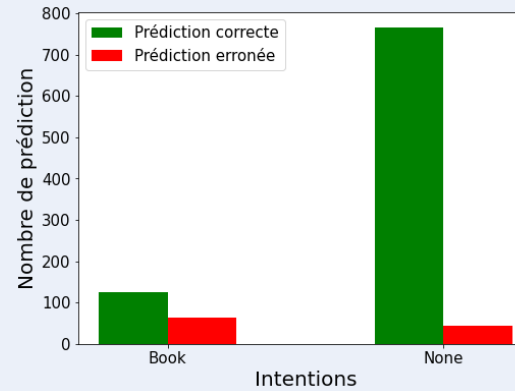
Accuracy = 0.89

Recall = 0.66

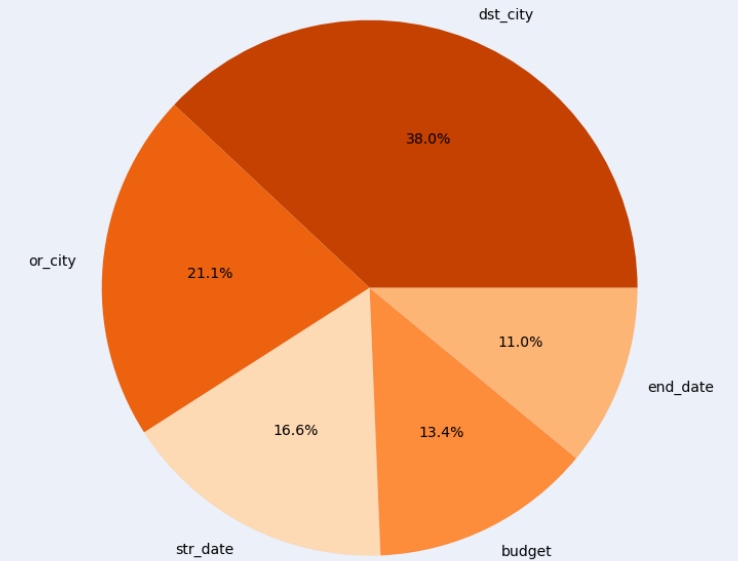
Precision = 0.74



true intention 'None'	765	44
true intention 'book'	64	126
	predicted intention 'None'	predicted intention 'book'



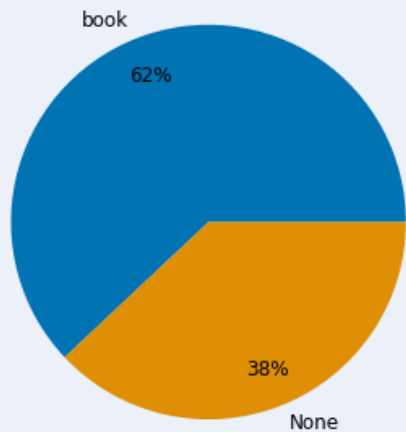
Répartition de nos entités dans les dialogues user



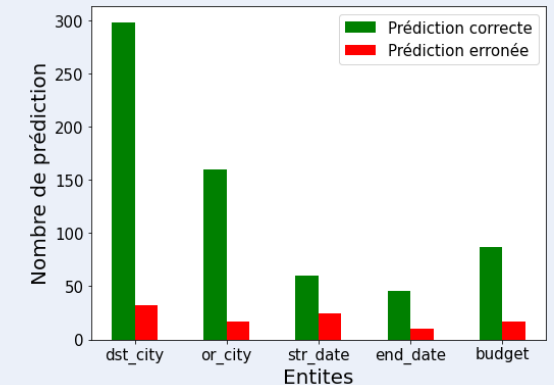
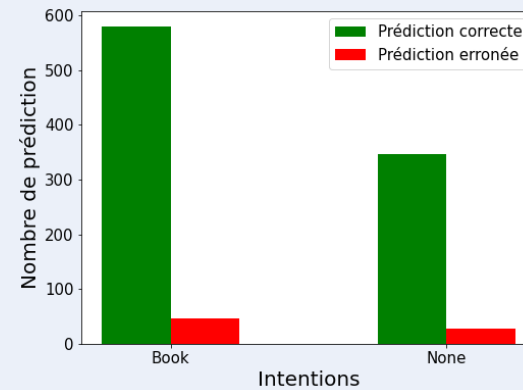
Accuracy = 0.93

Recall = 0.93

Precision = 0.96



true intention 'None'	347	27
true intention 'book'	46	579
	predicted intention 'None'	predicted intention 'book'



La précision sur les entités : 0.87

# Compétences

---



Exploration et extraction des données



Etablissement d'un modèle LUIS et déploiement du modèle



Création de pipelines pour l'entraînement et le test du modèle LUIS