

# SentiLens



# Uncover review's hidden sentiment

Understand thousands reviews at a glance  
Know what reviews are about  
More informative than simple star ratings



# Datasets - Preprocessing

## TEXT:

*<String>*

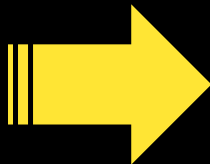
I charge it at night and skip taking  
the cord with me because of the  
good battery life.

## ASPECTS:

*<Array of dict>*

[{'term': 'cord', 'polarity': 'neutral',  
'from': '41', 'to': '45'},

{'term': 'battery life', 'polarity':  
'positive', 'from': '74', 'to': '86'}]



## WORD TOKENS:

*<Array of str>*

[I, charge, it, at, night, and, skip, taking,  
the, cord, with, me, because, of, the, good,  
battery, life, .]

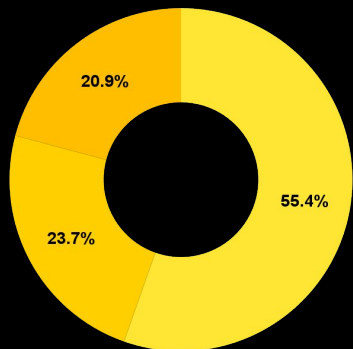
## ASPECTS UNIFIED BIO TAGS:

*<Array of str>*

[O, O, O, O, O, O, O, O, O, B-POS, O, O, O, O,  
O, O, B-POS, I-POS, O]



# Datasets - EDA



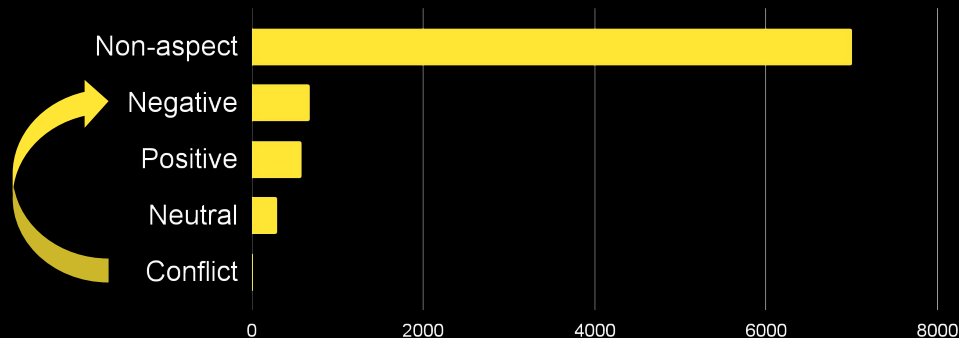
● Train ● Validation ● Test

**3,836 records**

# 1:20

aspect : non-aspect

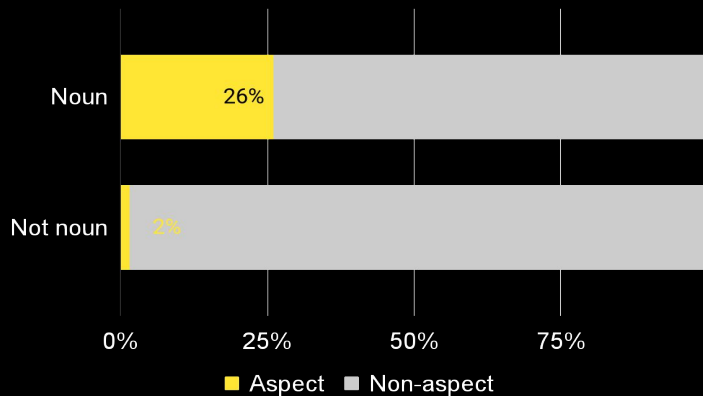
## Word count distributions



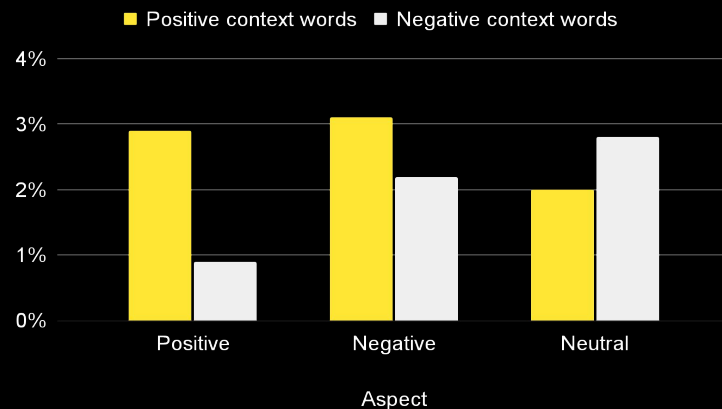


# Datasets - EDA

## Word's part of speech



## Aspects & context words' sentiment



# Model performance - CORNELL F1

Actuals

Mac version of Microsoft (Positive)

Predictions

Mac  
version  
of  
Microsoft - POS



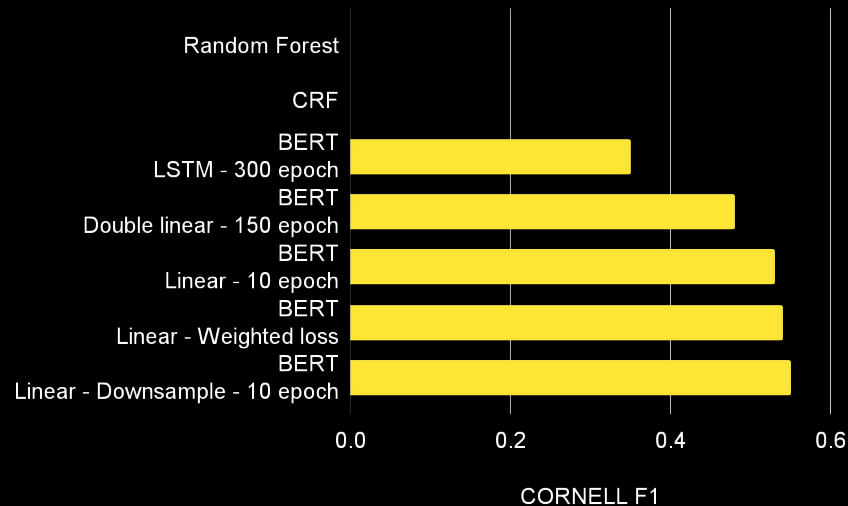
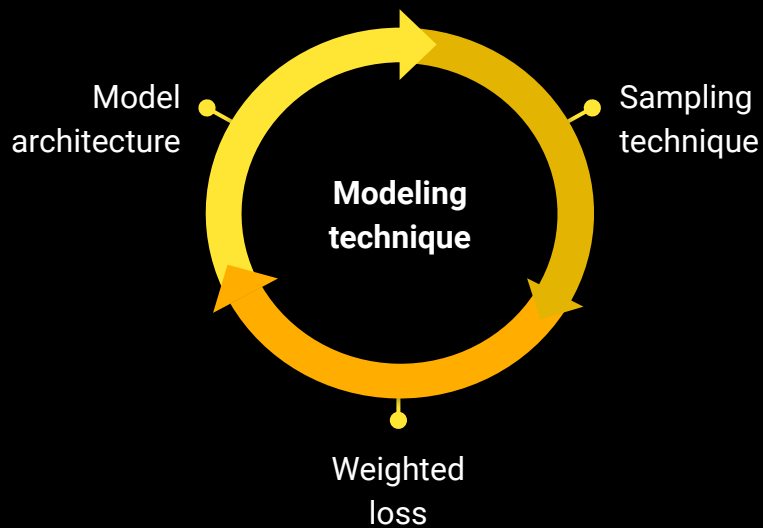
Mac - POS  
version  
of  
Microsoft - NEG



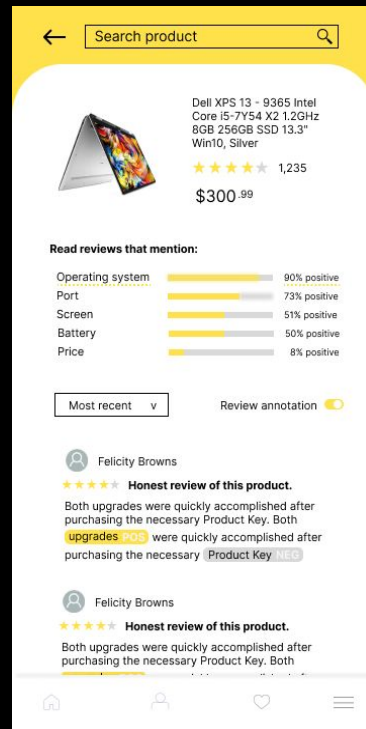
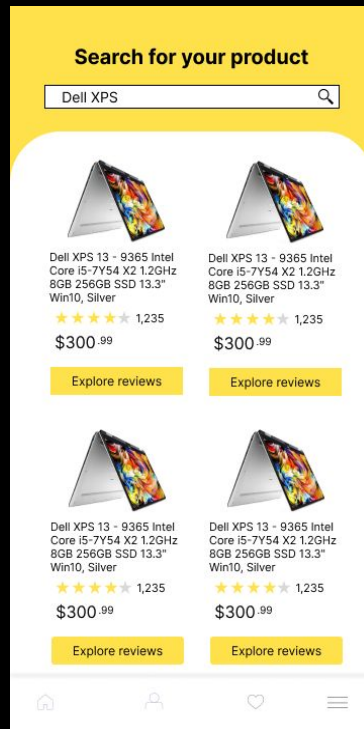
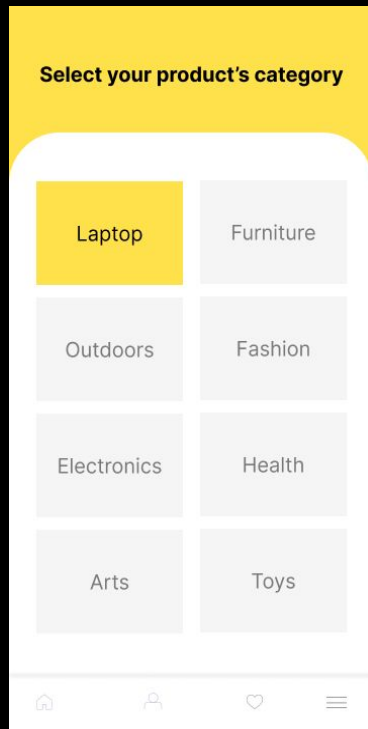
Mac  
version  
of  
Microsoft - POS



# Model comparison



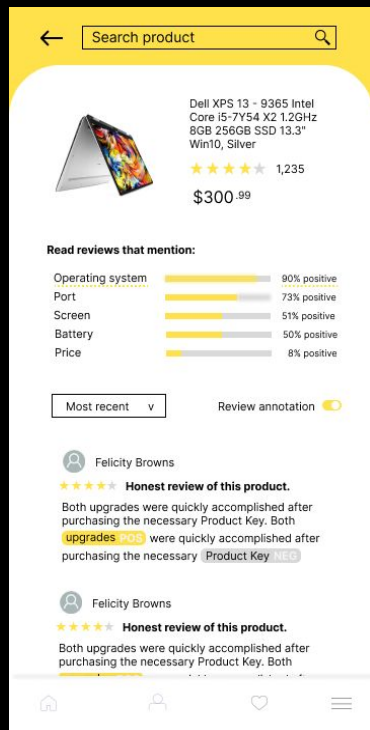
# Demo - End-users





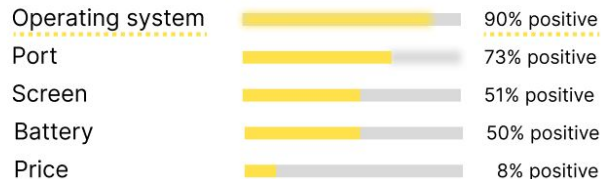


# Demo - End-users



## ASPECTS SUMMARY

### Read reviews that mention:



## ASPECTS HIGHLIGHT

### Felicity Browns

#### ★★★★★ **Honest review of this product.**

Both upgrades were quickly accomplished after purchasing the necessary Product Key. Both **upgrades POS** were quickly accomplished after purchasing the necessary **Product Key NEG**