

Predict sales lead by using LLM

E
sihyun Lee, jungmin Jo, byeongjun Park, june Kang

Table of Contents

- 01** Business Understanding
- 02** Data UnderStanding
- 03** Data Preparation
- 04** modeling
- 05** Evaluation
- 06** Deployment

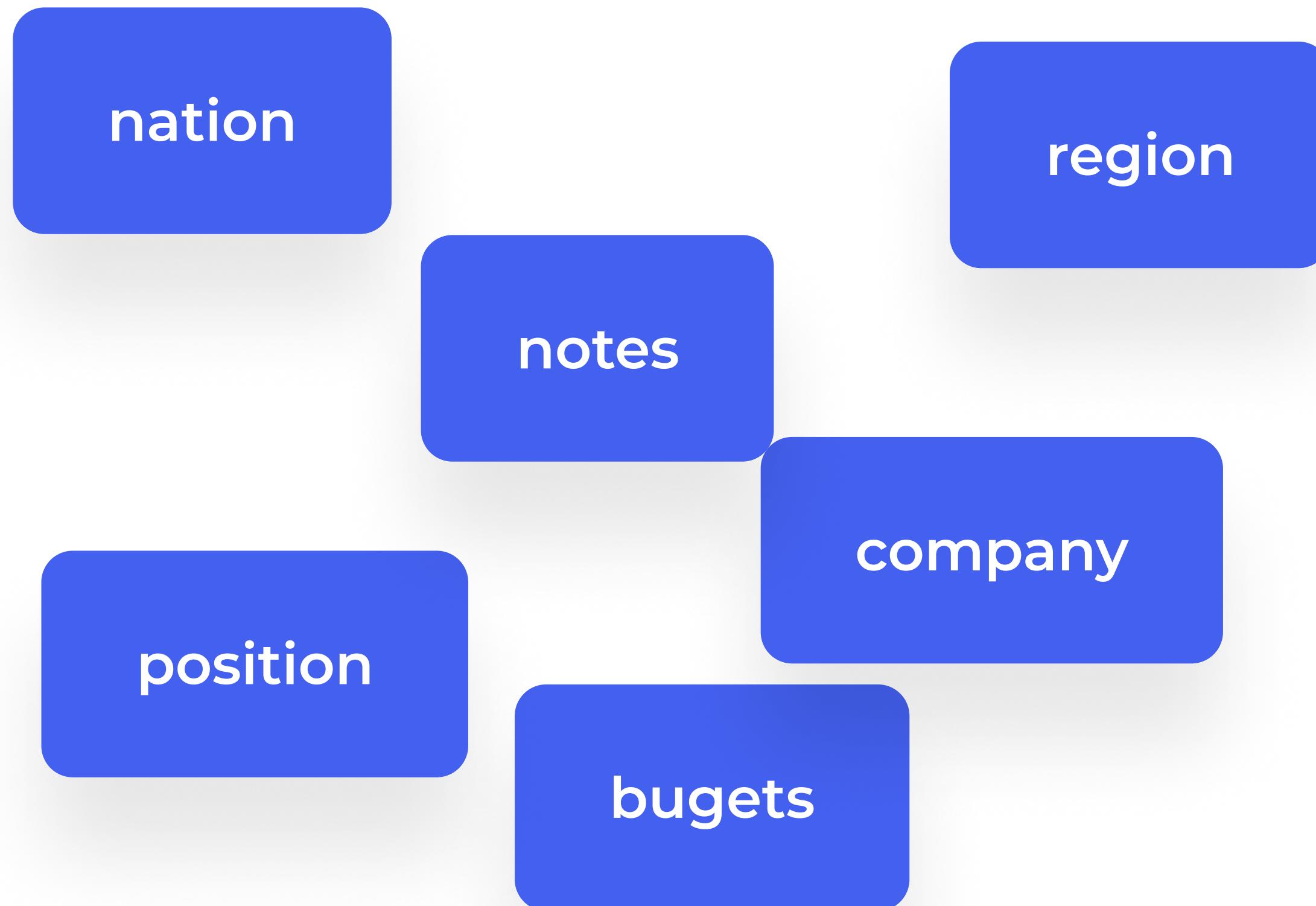
Sales lead

: a person or business who may eventually become a client

Sales lead

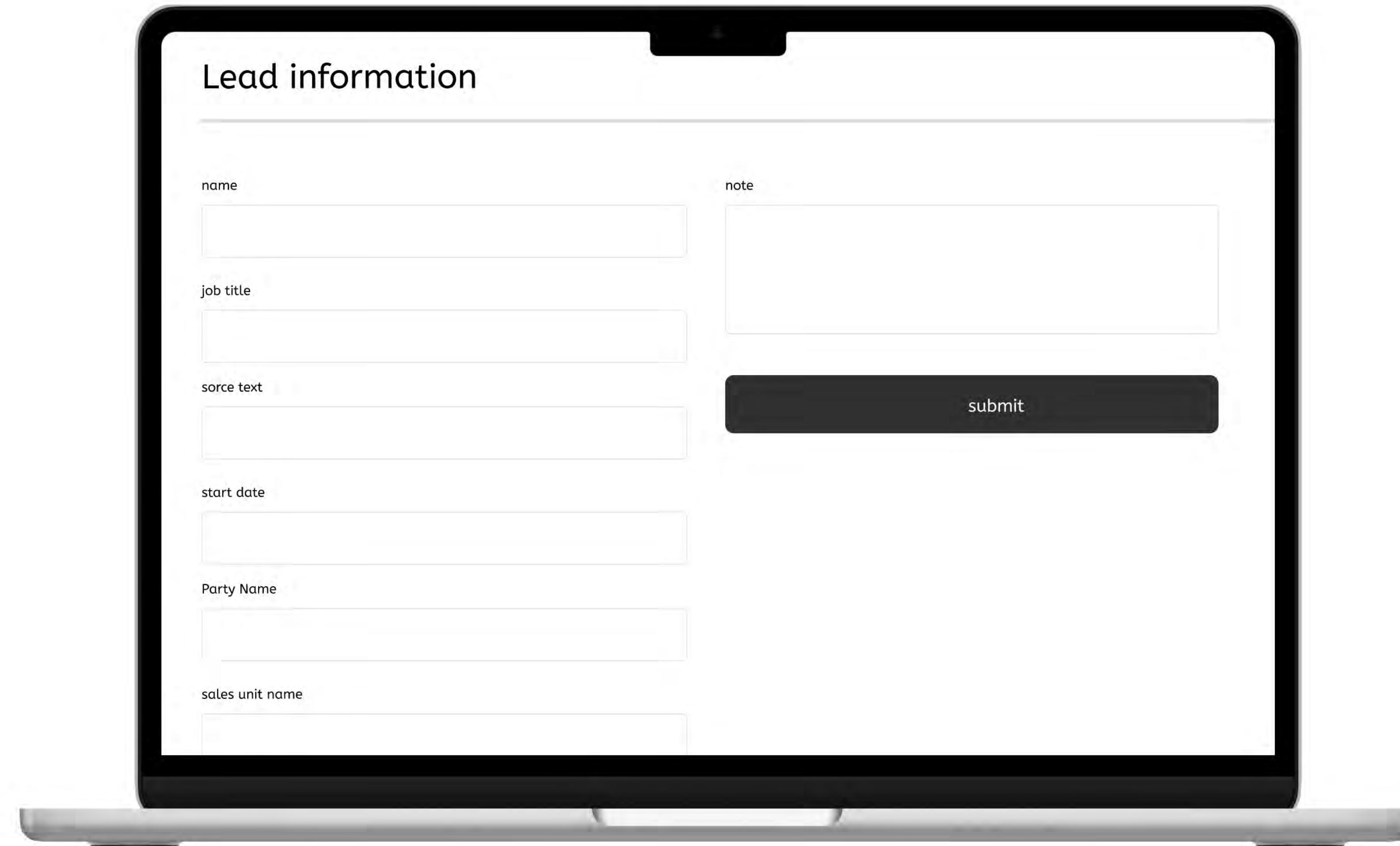
: a person or business who may eventually become a client

Business understanding



Lead qualification

Mock-up



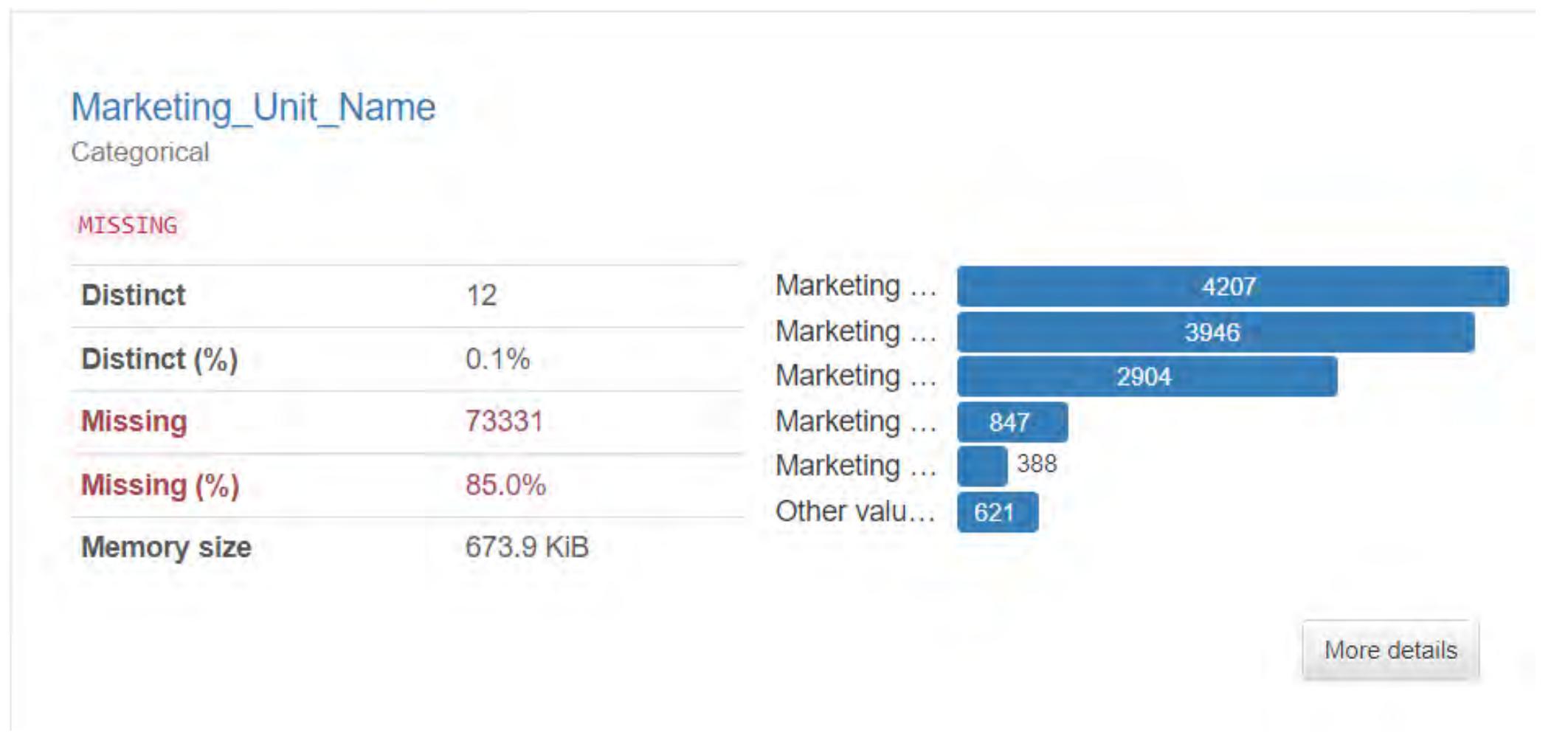
The image shows a black smartphone standing upright, displaying a mobile application interface. The app has a white background and a black header bar. The title "Lead information" is centered at the top of the screen. Below the title, there are several input fields and a central "submit" button.

The input fields are arranged in two columns:

- name**: A text input field.
- note**: A text input field.
- job title**: A text input field.
- sorce text**: A text input field.
- start date**: A text input field.
- Party Name**: A text input field.
- sales unit name**: A text input field.

A large, dark gray rectangular button labeled "submit" is positioned centrally below the input fields.

1. ydata profiling



Main_Contact_Person_Name

Text

| | |
|--------------|-----------|
| Distinct | 69297 |
| Distinct (%) | 80.3% |
| Missing | 0 |
| Missing (%) | 0.0% |
| Memory size | 673.9 KiB |

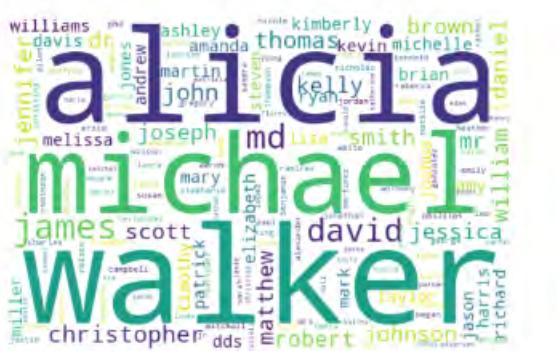


More details

Account_Party_Name

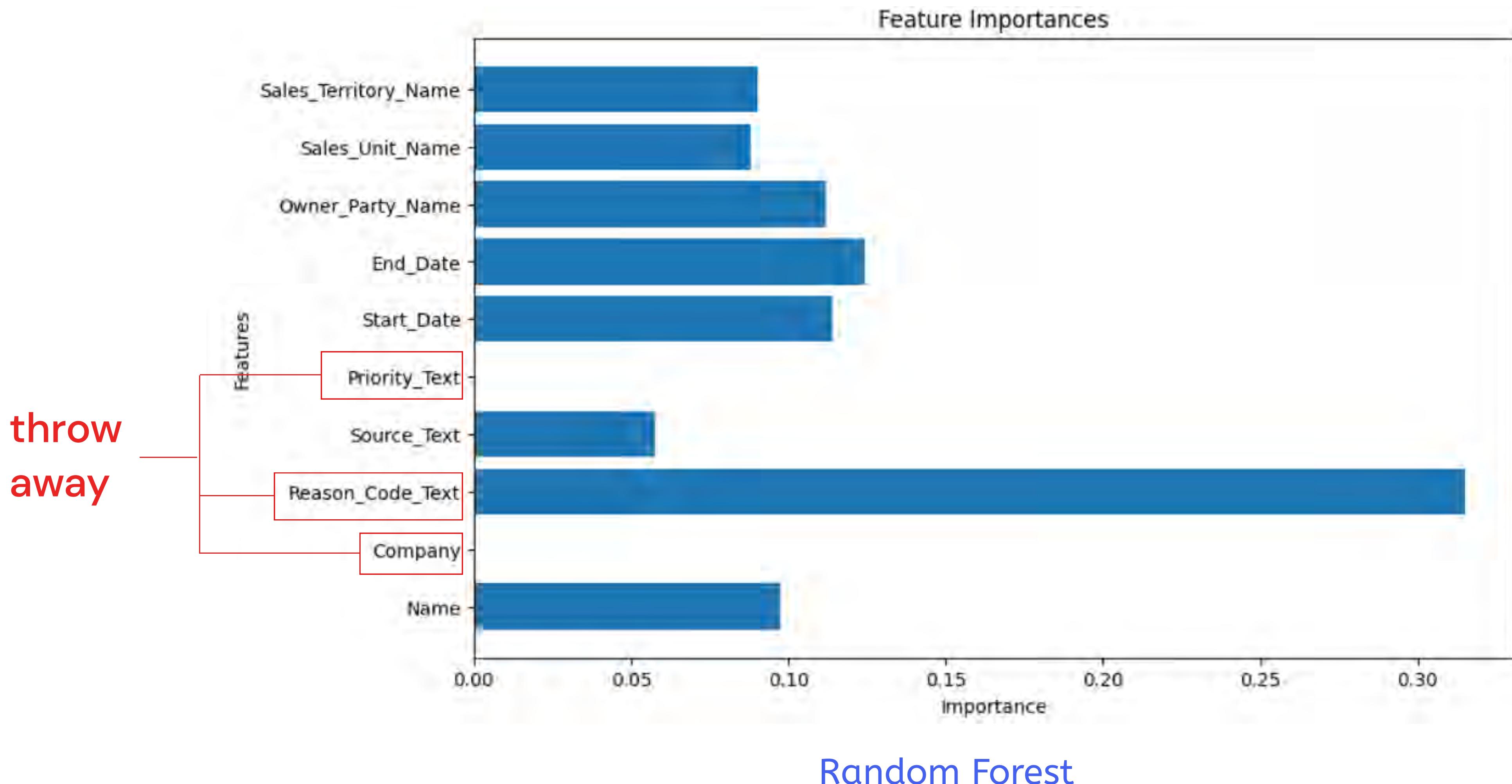
Text

| | |
|--------------|-----------|
| Distinct | 53081 |
| Distinct (%) | 61.5% |
| Missing | 0 |
| Missing (%) | 0.0% |
| Memory size | 673.9 KiB |



More details

2. Feature engineering



Data understanding

Name

Marketing_Unit_Name

Owner_Party_Name

Account_Party_Name

Main_Contact_Person_Name

Sales_Unit_Name

Unnamed

Note

Marketing_Unit_Name

Data understanding

Name

Marketing_Unit_Name

Owner_Party_Name

Account_Party_Name

Main_Contact_Person_Name

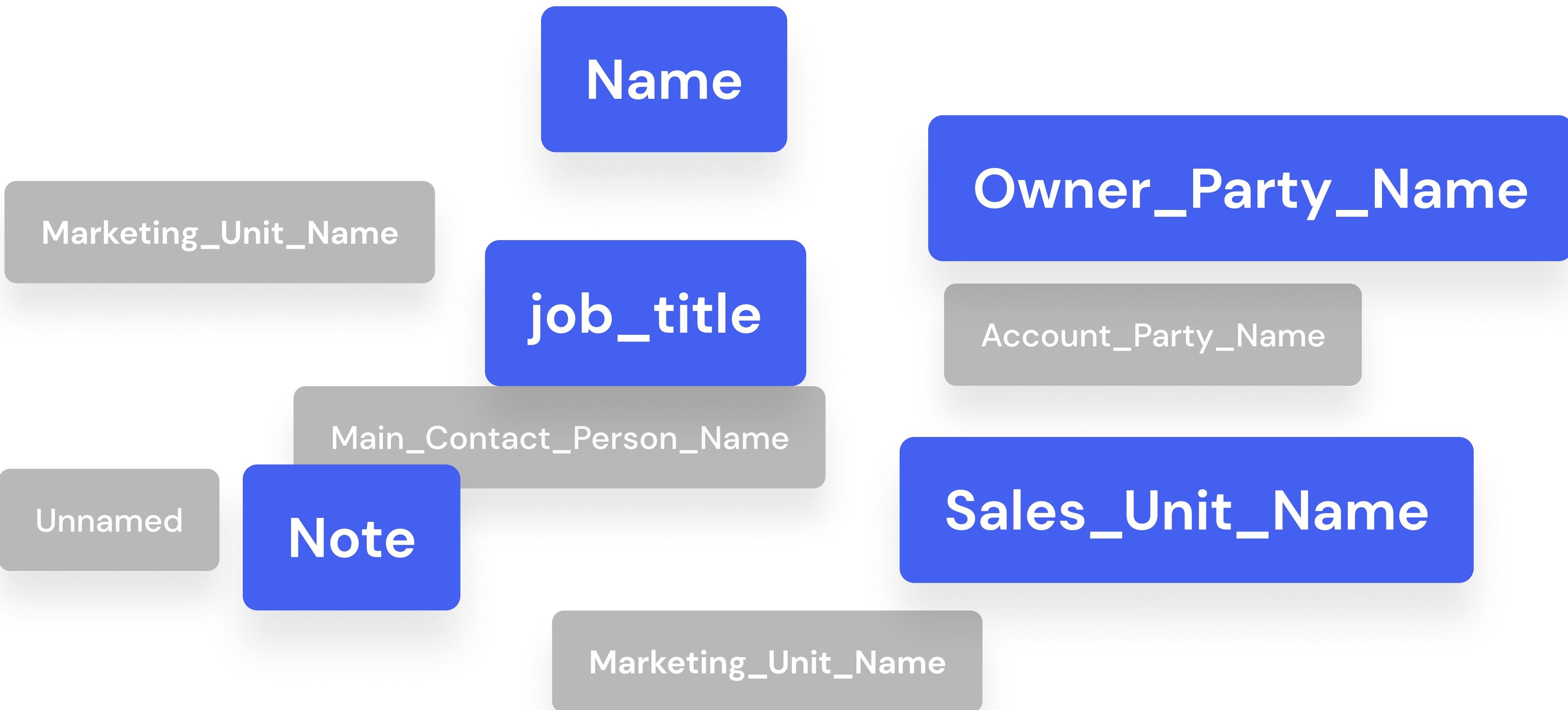
Unnamed

Note

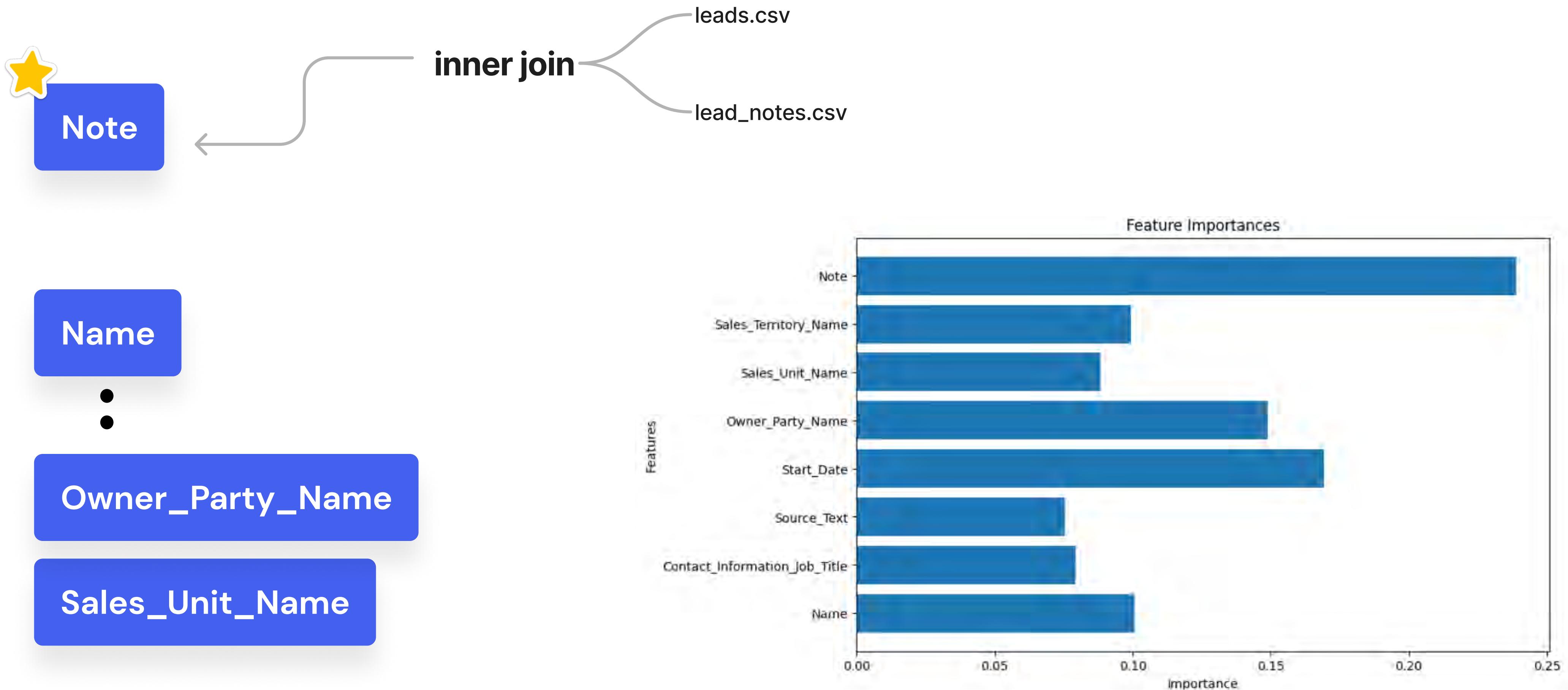
Sales_Unit_Name

Marketing_Unit_Name

Data understanding



3. Searching for notes



3. Searching for notes

Closed

A new contact has been registered (lead). If you want to convert your lead account to a potential customer account, please contact us

Brief inquiry (I want to order an estimate, what should I do)

I'm interested in your product, so I asked for an initial estimate

Converted

Request work-related details (customer → company)

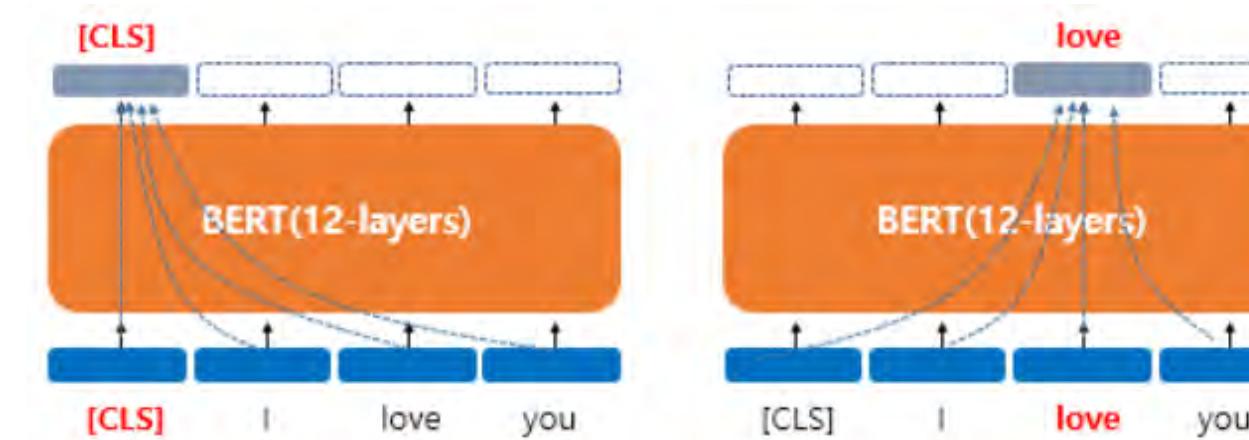
Send work-related mail

Order and modification requests for specific parts

Modeling



Hugging Face



Modeling



104 languages

Modeling

'Sales Rejected': 0
'Unqualified': 1
'Closed': 2
'Qualified': 3
'Converted': 4

status text column

Modeling

3:1

train: test data

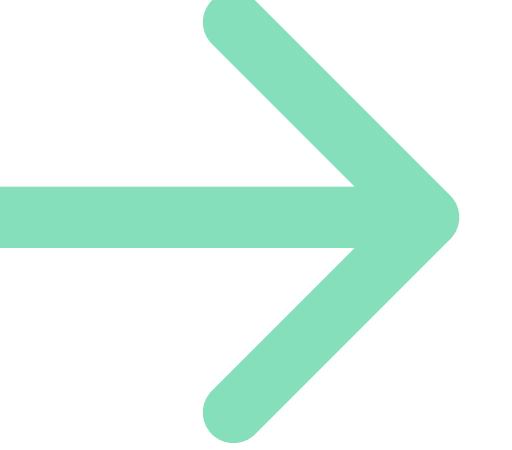
8:2

train: val

Evaluation

76%

Evaluation

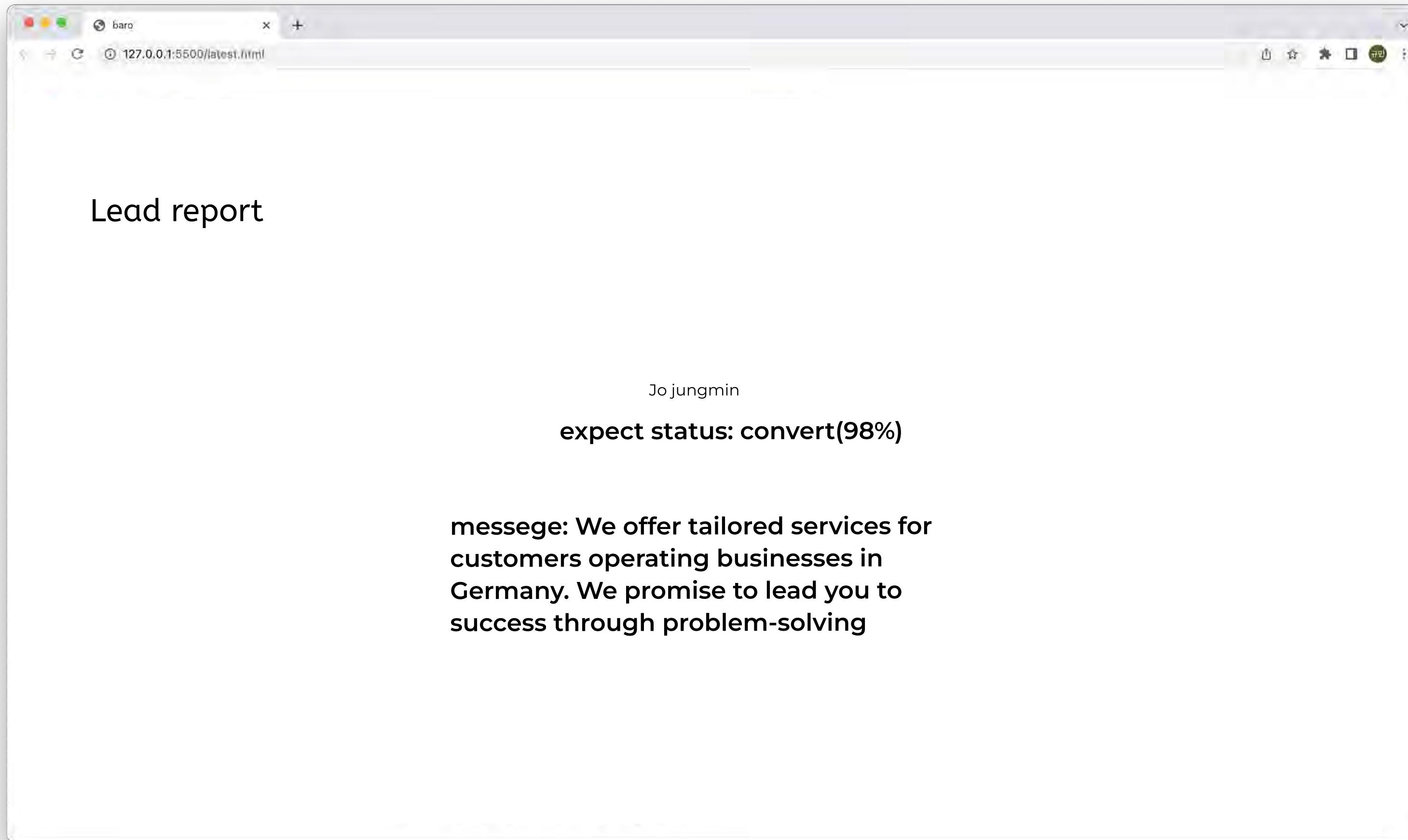
76%  88%

Deployment



interface

Deployment



response of customer status

Deployment: XAI

The screenshot displays a user interface for an XAI application. On the left is a dark sidebar with icons for home, user profile, and settings. At the top right is a search bar with placeholder text "Search information about team..." and a "Search" button. Below the search bar is a small icon.

The main area is titled "Overview". It contains several input fields:

- Name: web request
- Job: student
- Date: 2023-04-08
- party name: cho jungmin
- unit name: cho jungmin
- territory: Germany
- Note: i want some...

Below these fields is a "predict" button.

To the right of the input fields is a "prediction" section containing the text "converted(98%)".

Further down is a "text" section with the following table:

| | score which changes prediction when you change the value |
|-------------------------|--|
| Name=web request | 9.2 |
| Job=student | 3.3 |
| Date=2023-04-08 | 2.8 |
| party name=cho jung min | 6.1 |
| unit name=cho jung min | 6.9 |
| territory=Germany | 2.7 |
| note=i want some... | 3.0 |

report of status

How to use

marketing and advertising targeting

This ensures advertising budgets are used more efficiently and marketing efforts are directed towards relevant audiences.

Personalized Marketing Campaigns

Providing tailored content or offers to each customer improves the overall customer experience.

Enhancing Customer Service

Providing more personalized services increases customer satisfaction.

team



PO/Data

Lee



SM/FE

JO



AI

Kang



AI/Data

Park

team

scrum board

| To-do 7 | In progress 6 | Complete 6 |
|--|---|---|
| 3. Organizing presentation materials 이시현 J. jeong min | 1. planning 2,3th goal 이시현 | make roles |
| 1-2. merge csv files June K. | 0. testing model June K. | searching for reference J. jeong min 이시현 |
| 1-3. model hyperparameter optimization June K. | 1. test 100 data June K. | data preprofiling June K. 슈퍼준 |
| 2. merge website and model June K. | 1. searching random forest model 슈퍼준 | choose LLM model June K. |
| 2. write scrum report J. jeong min | 2. coding 슈퍼준 | making website html J. jeong min |
| 3. improving website html J. jeong min | 1. write meeting report J. jeong min | make mockup 이시현 |
| 2. planning dataframe 이시현 | + New | + New |



Questions?