anrt
agence nationale de réglementation des télécommunications
الوكالة الوطنية لتقنين المواصلات

INPT
المعهد الوطني للبريد والمواصلات
Institut National des Postes et Télécommunications

FAANG LAY-OFFS

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School year : 2022/2023

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INTRODUCTION

Problem, Solution,
Requirements, Planning

Problem & Idea

Solution

More than 91,000 workers in the U.S. tech sector have been laid off in mass job cuts so far in 2022.

Many People are currently worried about their current position.

Create an online platform that gives you the probability of getting laid off based on Linkedin Profile

Functional requirements

Guest

Linkedin Profile → Obtain probability of Layoff

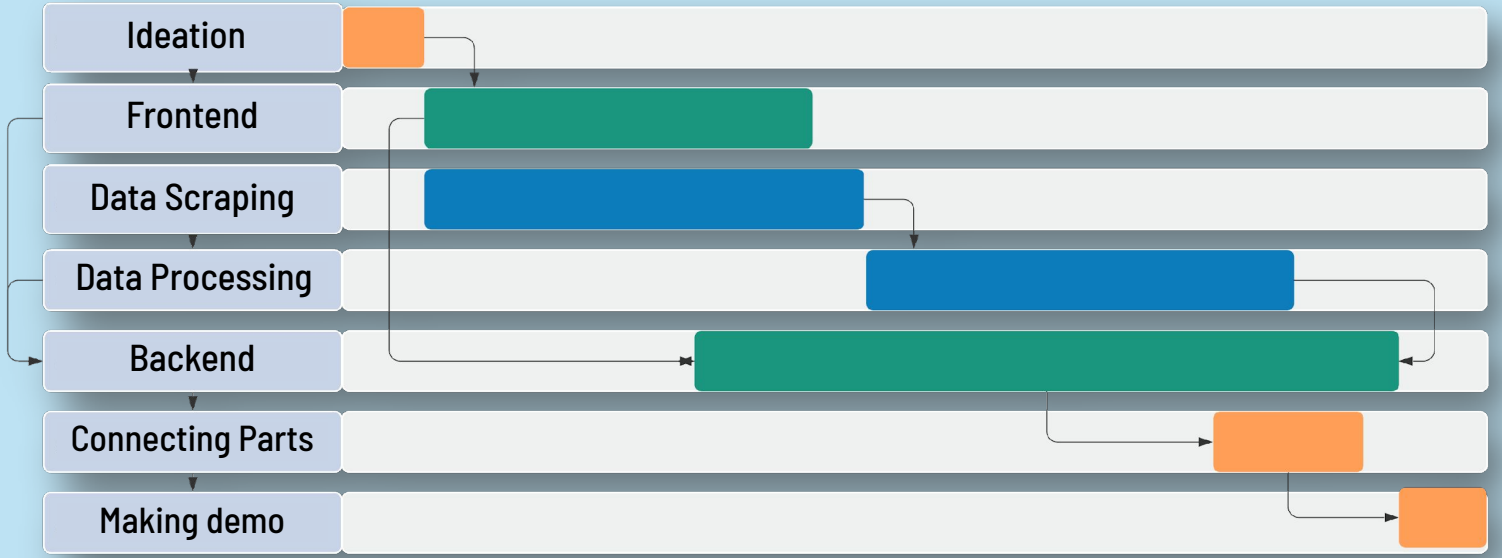
User

Authentication → Linkedin Profile → Obtain probability of Layoff → Getting other suitable job Offer

Non Functional requirements

- Confidentiality
- Easy-to-use
- Progressive Change
- Adaptability

Planning


Ideation
Frontend
Data Scraping
Data Processing
Backend
Connecting Parts
Making demo

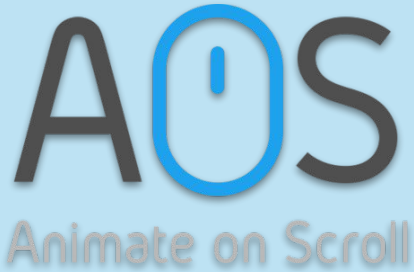
ARCHITECTURE

Frontend, Backend, Data Collection, Machine Learning

FRONTEND

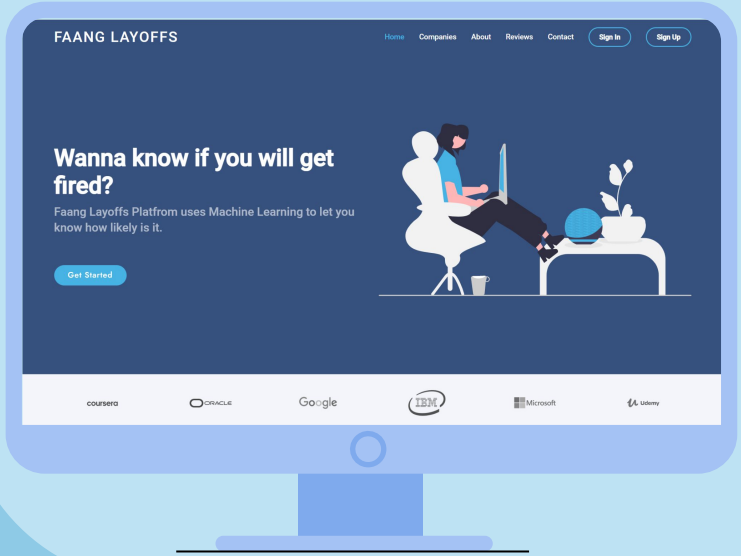
Development Tools, Interfaces ...

Frontend Technologies

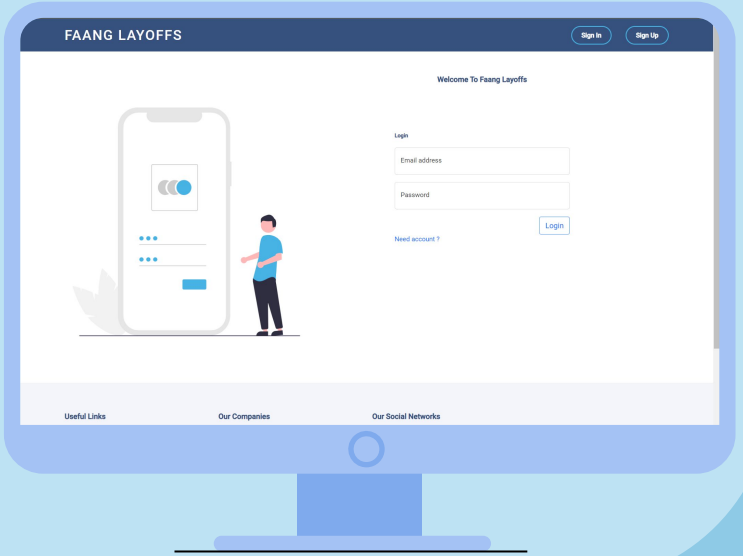


User Interface

Landing Page



Login Page

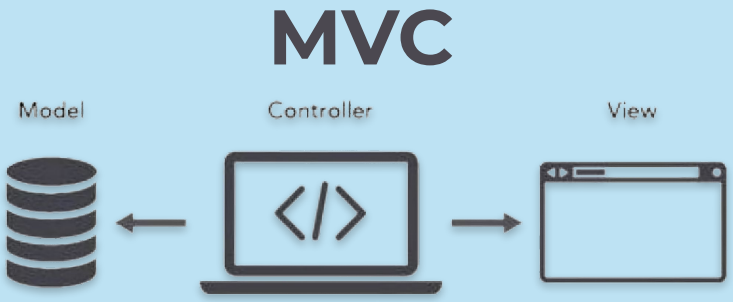


BACKEND

Development Tools, Architecture...

Backend Technologies

Backend Architecture



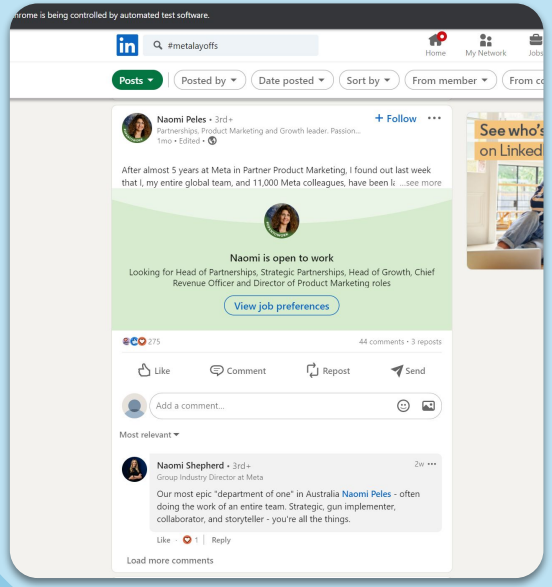
JPA
Java Persistence API
HIBERNATE

JWT

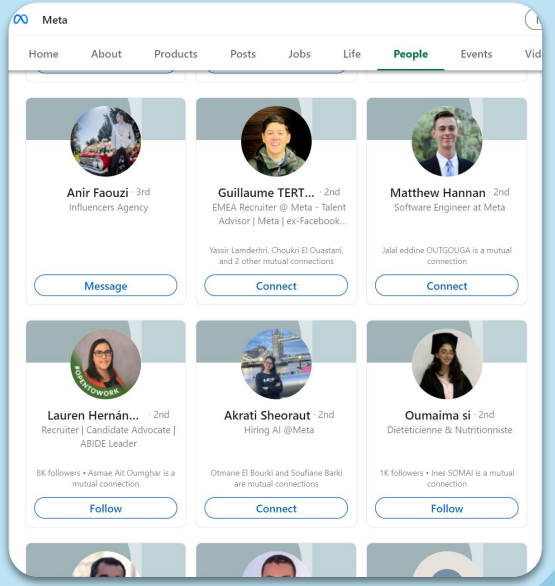
MACHINE LEARNING

Data Scraping, Data Processing,
Model Building...

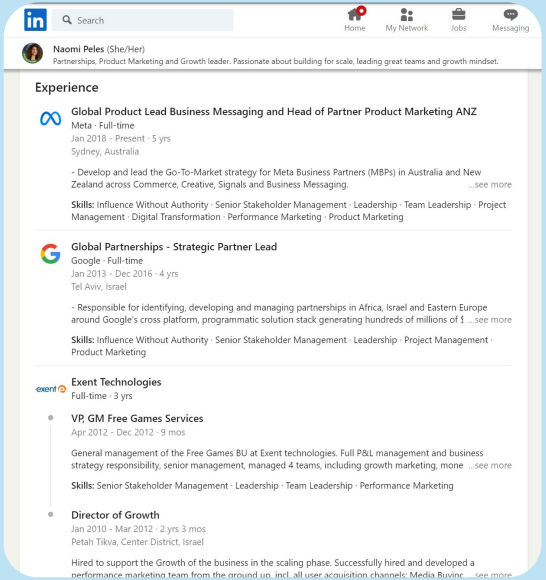
Data Scraping



DATA SOURCE



Data Preparation

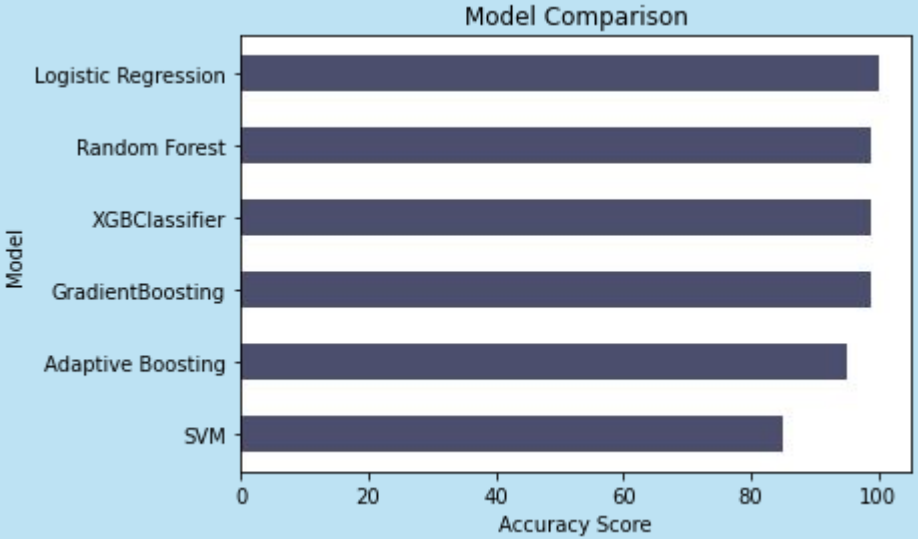



```
data
```

	Name	Headline	Location	Company	Company_Months	Work_Months	Laidoff
0	Jillian James	Software Engineer	Nevada	Meta	38	273	False
1	Daniel Nguyen	Software Engineer	Arizona	Meta	141	213	False
2	Samantha Robertson	Project Manager	Minnesota	Meta	138	341	False
3	Antonio Hernandez	Data Engineer	Maryland	Meta	134	213	False
4	Sarah Whitney	Data Analyst	Indiana	Meta	193	337	False
...	...	...	...	...	...	...	...
1847	Sabrina Harris	Product Manager	Washington	Meta	204	233	False
1848	Chelsey Meyer	Data Scientist	Kentucky	Meta	224	296	False
1849	Patrick Ray	Data Engineer	Washington	Meta	192	205	False
1850	Julia Harris	Program Manager	Michigan	Meta	36	97	True
1851	Amy Stanley	Data Scientist	Maine	Meta	156	289	False

1852 rows × 7 columns

Model Building



Accuracy Score

Logistic Regression: 99.6%
Random Forest: 98.92%
XGBClassifier: 98.65%
Gradient Boosting: 98.65%
Adaptive Boosting: 94.88%
SVM: 84.91%

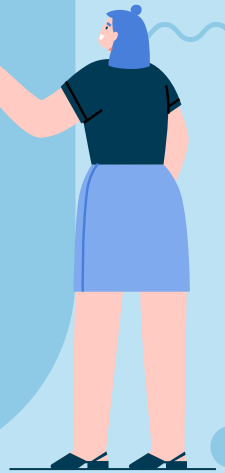
Machine Learning Technologies

DEMO

Watch live Demo!

CONCLUSION

Scraping is 😔 hard

But Spring is fun 😀

Thanks for your attention!