

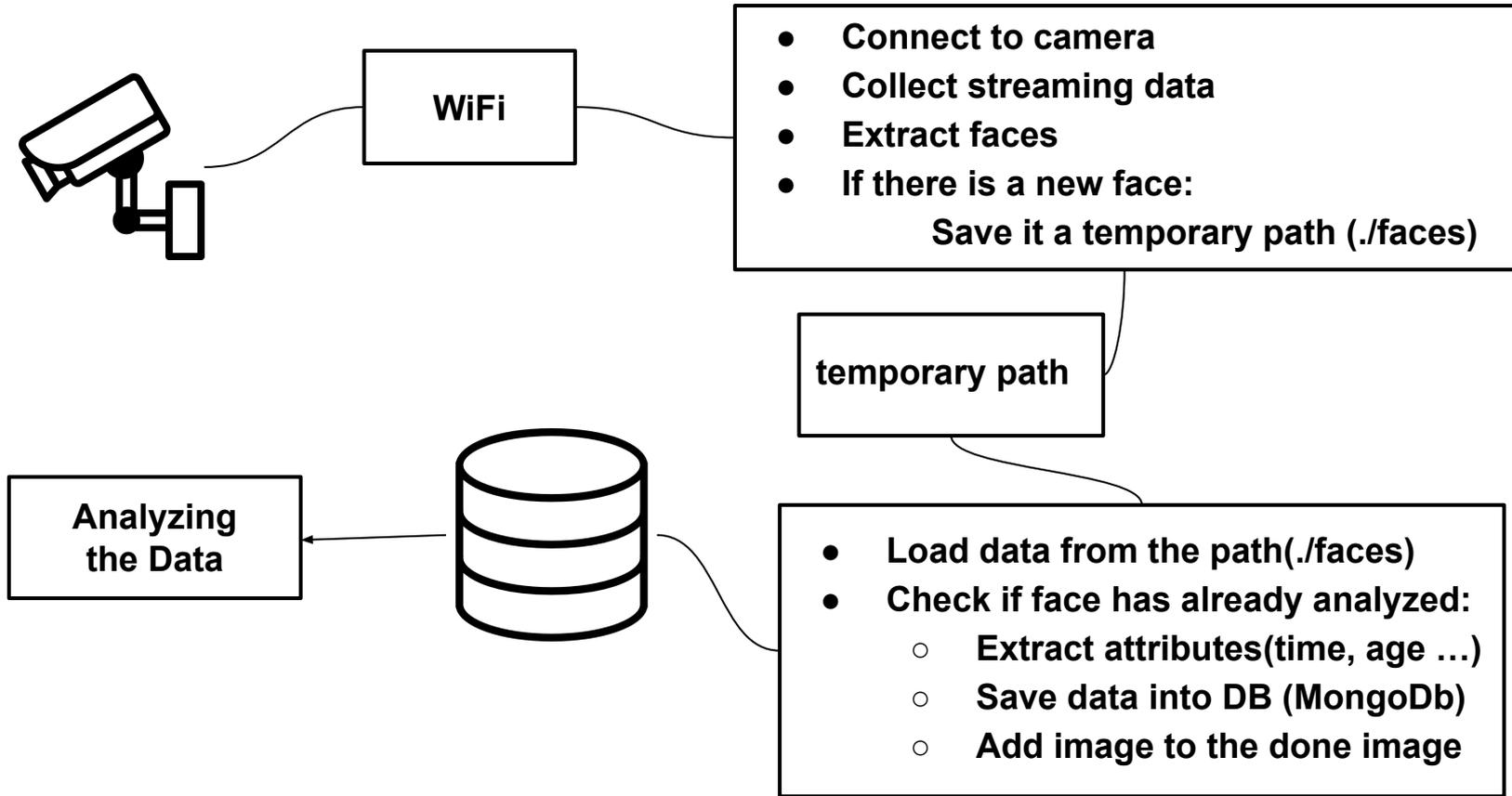
:)

:(

Customer Decoder

Challenge by Systems

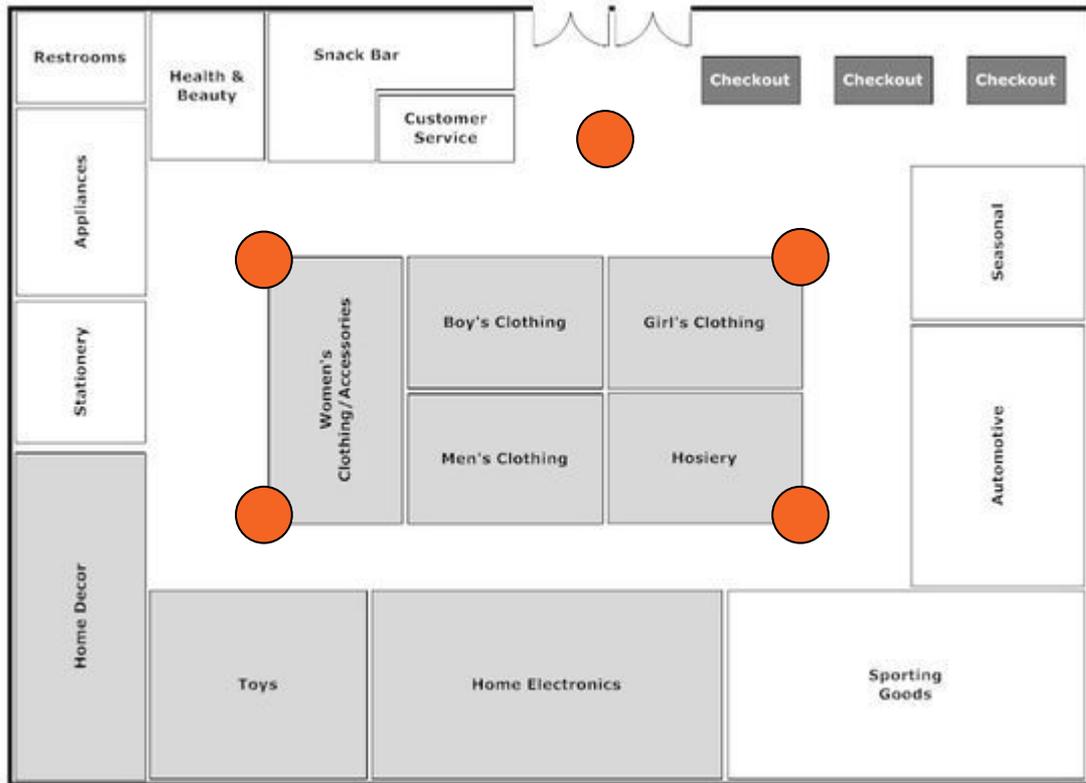
Hamid Omidi, Ludovico Valenti, Alessia Meloni





Face pic (Temporarily) | Normalized, Aligned

```
{  
  "date_time": "Sat May 11 2022 21:50:13",  
  "age": {"$numberInt": "32"},  
  "Emotion": "sad",  
  "sex": "M"  
}
```



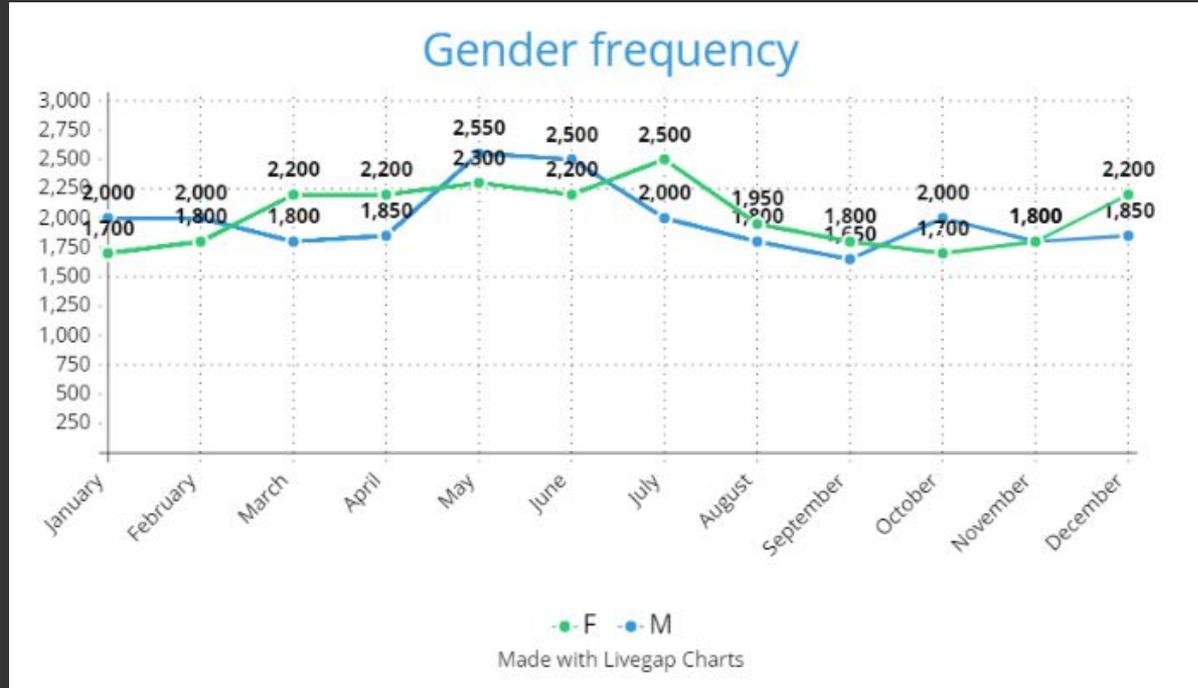
 Camera

- Sections that a person visited
- Spent time

—

How can we use the data?

Data analytics

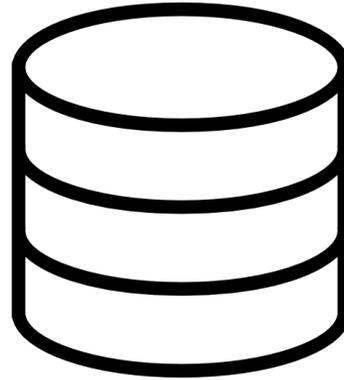
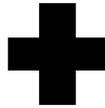


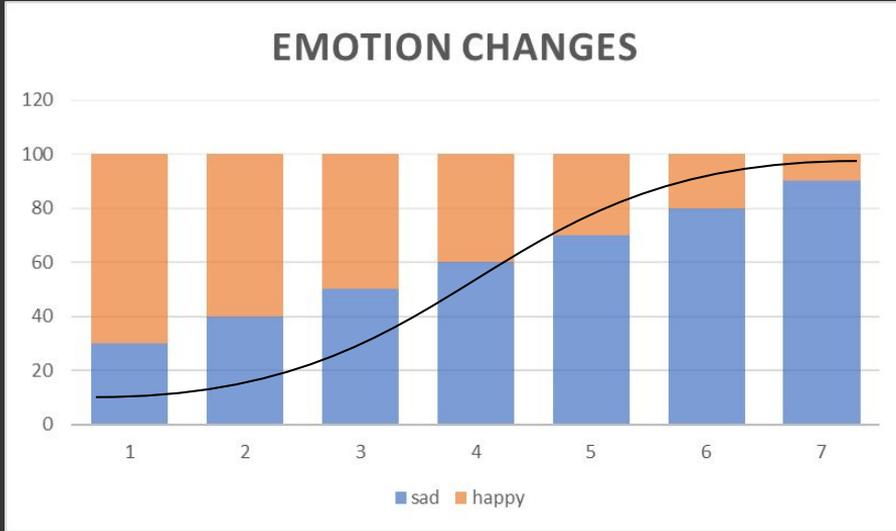
—

Entrance Emotion - Exit Emotion

Overall emotional Impact

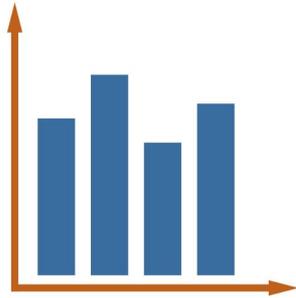
```
{  
  "_id":{"$_oid":"636ecf7eaf93c0615f3705b0"},  
  "date_time":"Sun May 15 15:50:13 2022",  
  "age":{"$numberInt":"32"},  
  "Emotion":"sad",  
  "sex":"M"  
}
```





Predicting the product sale based on the emotional changes

Increase(sad) → Increase(A, S)



Neutral, F, Old → Mon

	date_time	age	emotion	sex	sec
0	2022-06-04 21:23:00	32	surprised	M	3
1	2022-08-16 02:52:10	60	surprised	F	3
2	2022-02-20 15:15:53	36	neutral	M	1
3	2021-12-24 20:54:44	60	surprised	F	1
4	2022-06-01 13:22:28	42	fear	M	3
...
995	2022-05-08 19:29:58	42	neutral	M	2
996	2022-01-04 18:54:19	52	disguised	F	1
997	2022-02-06 06:12:02	37	fear	F	2
998	2022-06-27 19:04:42	36	disguised	F	2
999	2022-09-06 19:03:20	56	neutral	M	2

Classification
(like KNN)

Prediction Of section
Neutral, F, Old → sec 1

- Enrich section 1 on Mondays
- Increase the prices on section 1 :|

Future improvements

Infrastructure

- Replace **temporary path** with **Queue**(e.g. Redis) for efficiency

Core

- Use **Multi Camera - Multi Object tracking - Reidentification**
- Add other data (dresscode, color and ...)



Thanks ;)

Decode

Understand your customers

Customer Decoder ;)



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