## DISEASES PREDICT

## Members:

- **HEUDE Dilane**
- SIMO Daina
- TCHAMBA Minette
- MAFOGANG Borelle
- MINKA Loyd





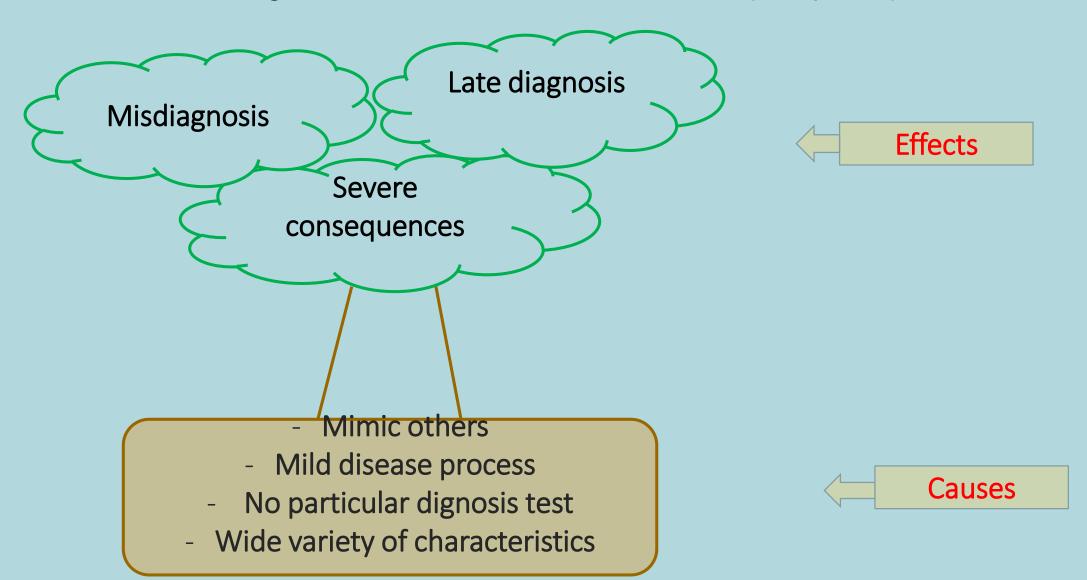






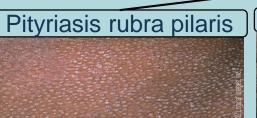
## WHAT?

Prevalence of misdiagnosis: 1 out of 20 adults in 2019 (Docpanel)



## **CASE STUDY: Dermatology**

Differential diagnosis of Erythemato-squamous diseases

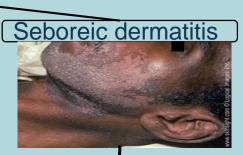












34 features

#### **Clinical Attributes**

Oral mucosal involvement Erythema

Scaling Knee and elbow

Definite borders

Itching

Koebner phenomenon

Polygonal papules

Follicular papules

involvement

Scalp involvement

Family history

Age

### Histopathological Attributes

Melanin incontinence

Eosinophils in the infiltrate

PNL infiltrate

Fibrosis of the papillary dermis

Exocytosis

**Ecanthosis** 

Hyperkeratosis

Parakeratosis

Clubbing of the rete ridges

Elongation of the rete ridges

Thinning of the suprapapillary

epidermis

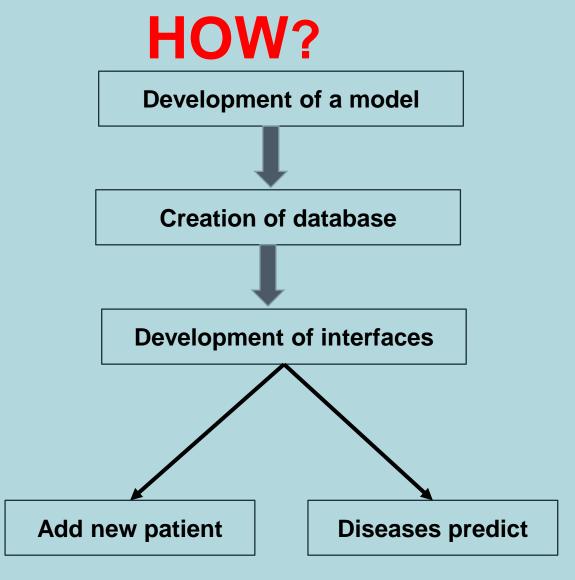
Epongiform pustule

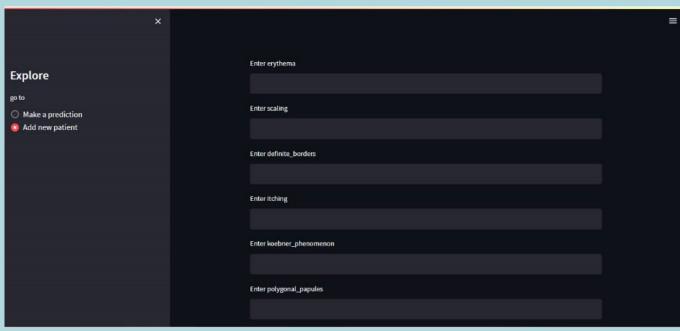
Munro microabcess

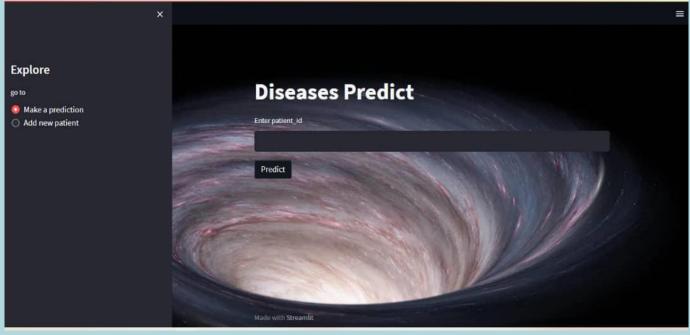
Focal hypergranulosis

Disappearance of the granular

layer







# **TOOLS USED**

PICKLE

| EXCEL                         | Cleaning, pre-treating mising values and encoding data (0,1,2,3,4,5,6)                 |
|-------------------------------|--|
| PANDAS                        | Manipulation of data set   |
| MATPLOTLIB                    | Visualisation of data  |
| SKLEAN                        | Construction of the model, determination of the metric of evaluation of the model (F1) |
| STREAMLIT                     | Conception of the application (front-end and back-end)                                 |
|                               | Creation of the database   |
| MYSQL-<br>MYSQL-<br>CONNECTOR | Connectiong the application to the database  |
|                               | Saving the model and intergrating it in the application                                |

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