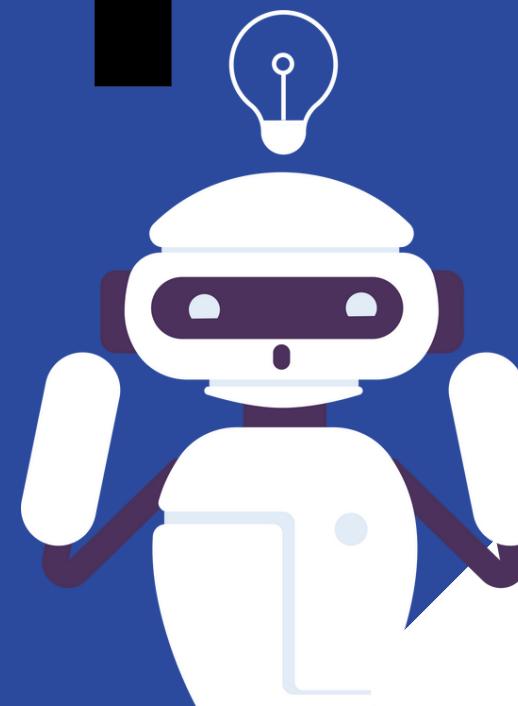




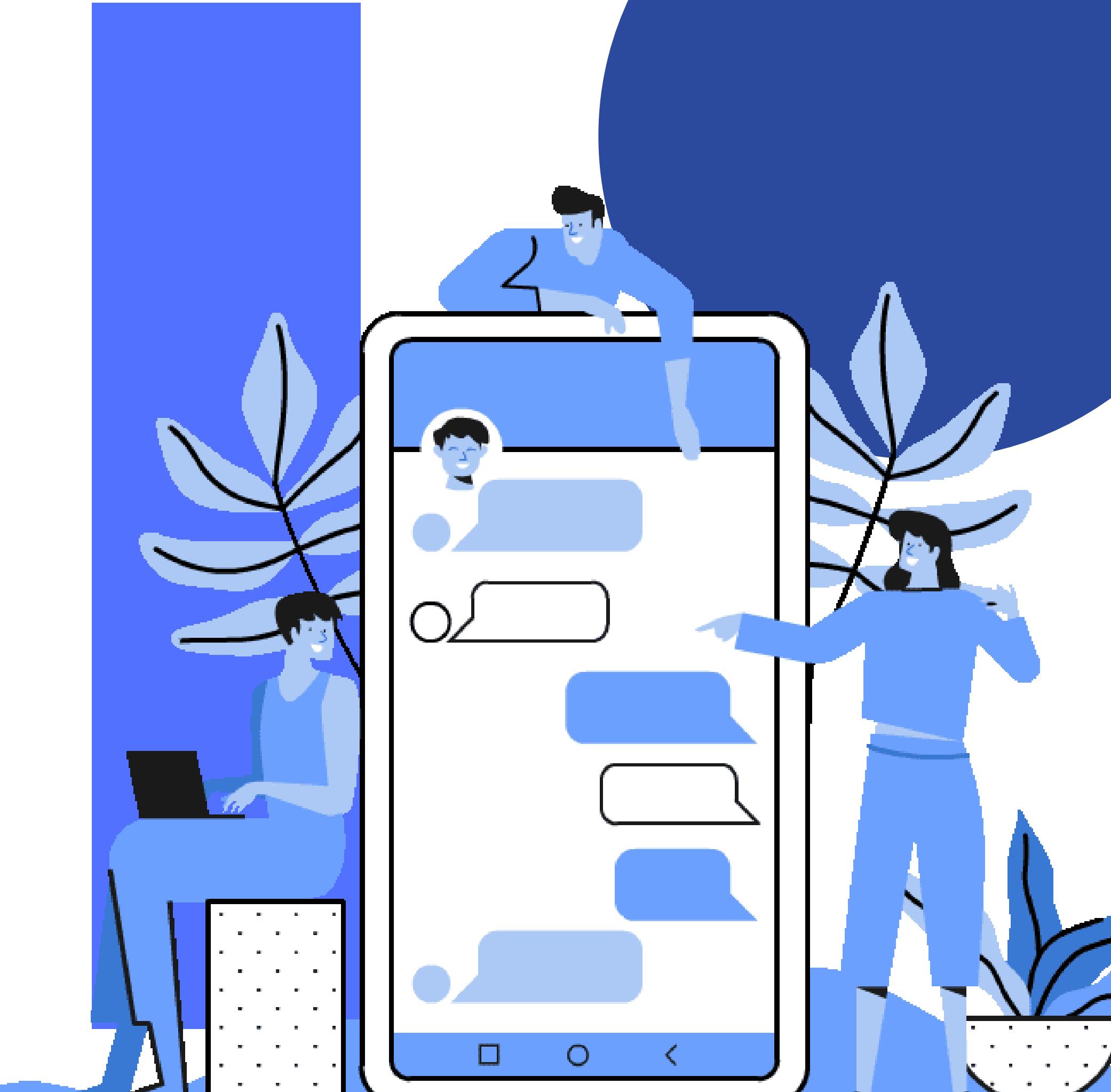
# DETBOT



*Grupo nº12  
Projeto nº13*

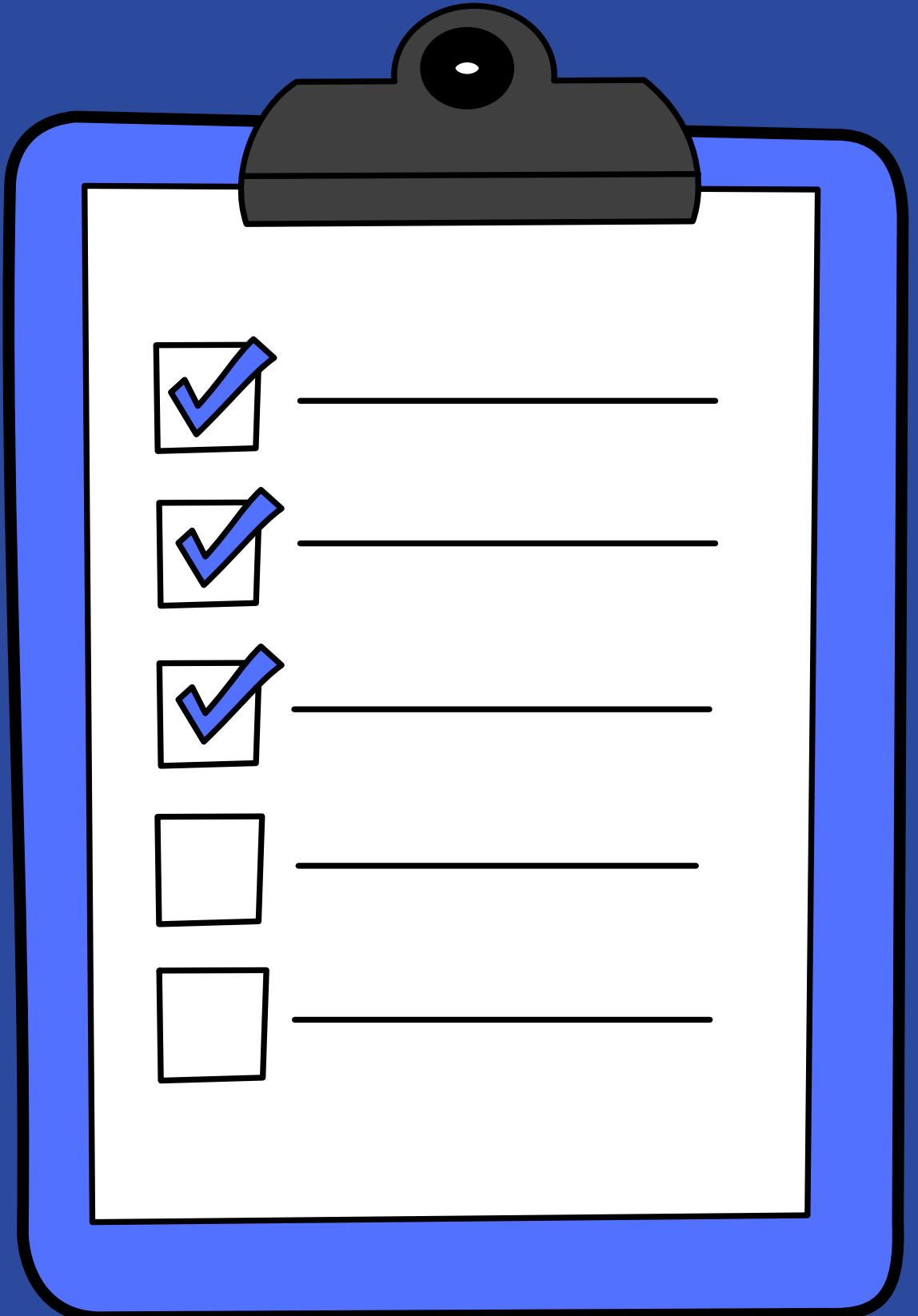
# DETI BOT

OUR PRODUCT



# 1

# REQUIREMENTS GATHERING



# PERSONAS

Joana Mota



Age	22
Occupation	DETI student
Sex	Female
Location	Aveiro

## Scenario

Joana wants to know when her easter holidays start and end.

Quando são as férias da Páscoa?

As férias da páscoa na UA em 2024 irão decorrer desde 25 a 31 de abril.

# PERSONAS

Francisco Vale



Age	18
Occupation	Highschool Student
Sex	Male
Location	Porto

## Scenario

Francisco is interested in studying LEI in Aveiro.

He wants to know what subjects he'll get to know in his first year

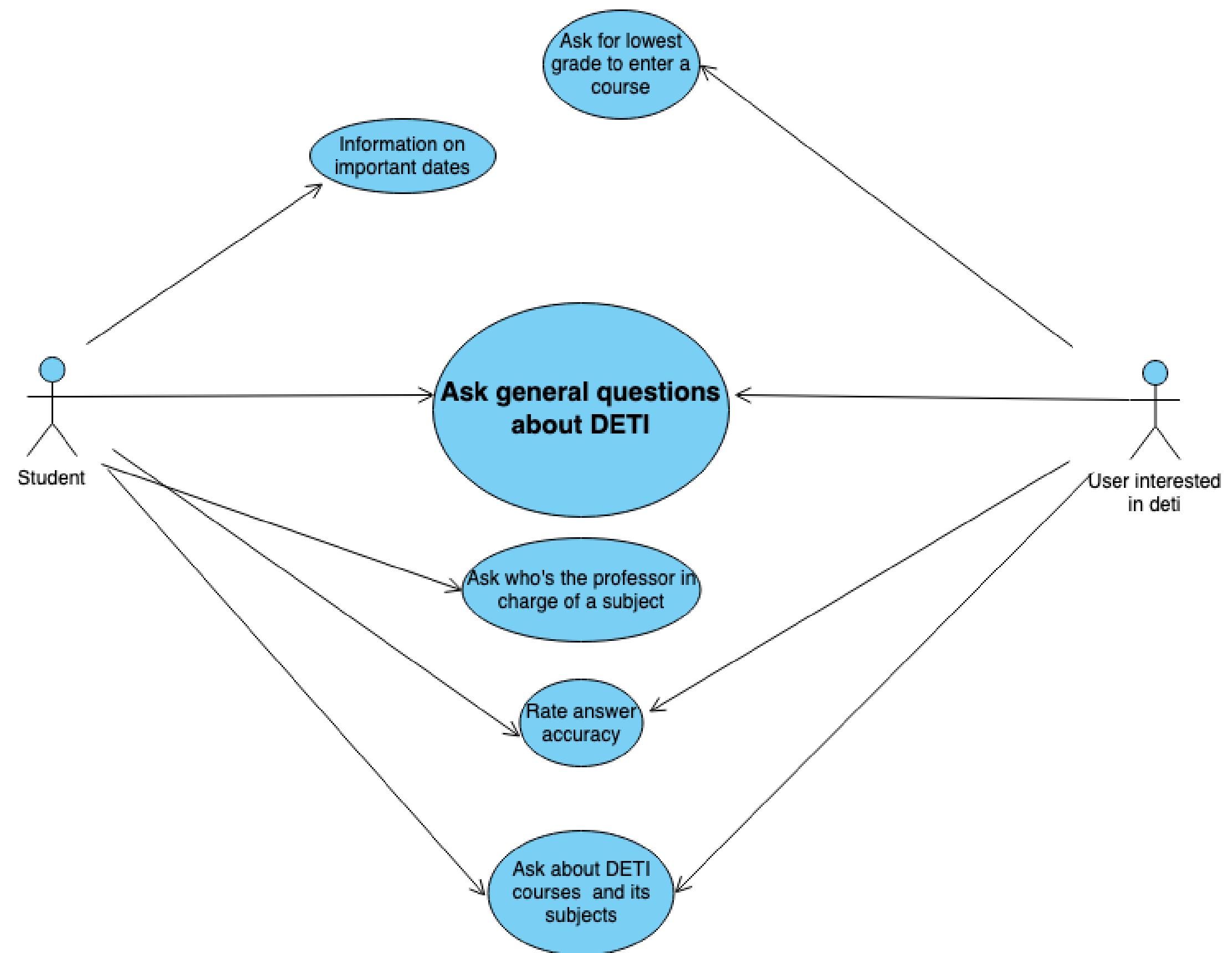
Que cadeiras irei frequentar no primeiro ano do curso de Engenharia informática em Aveiro?

No primeiro ano do curso de Engenharia Informática irá frequentar as seguintes cadeiras:

- Fundamentos de programação
- Introdução às Tecnologias Web

...

# ACTORS + USE CASES



# MAIN FUNCTIONAL REQUIREMENTS

select language pt/en

select trending querys

ask a question by text or voice

receive question by text or voice

view chat history  
rate answer accuracy



# NON-FUNCTIONAL REQUIREMENTS



## Performance

Scalability

Response Time



## Maintainability

Modularity

Documentation

## Availability

Error Handling

Fault Tolerance



## Usability

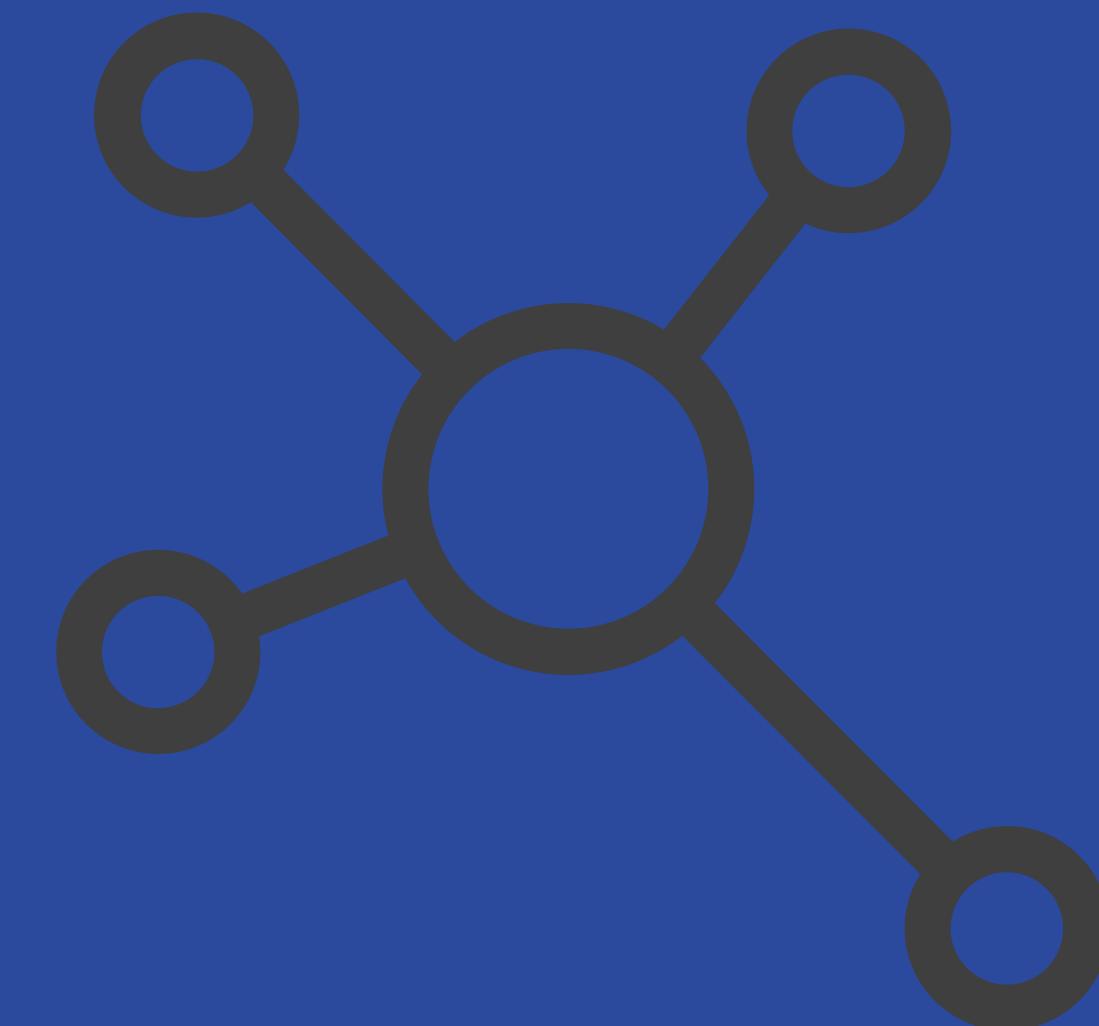
User-friendly UI

Accessibility

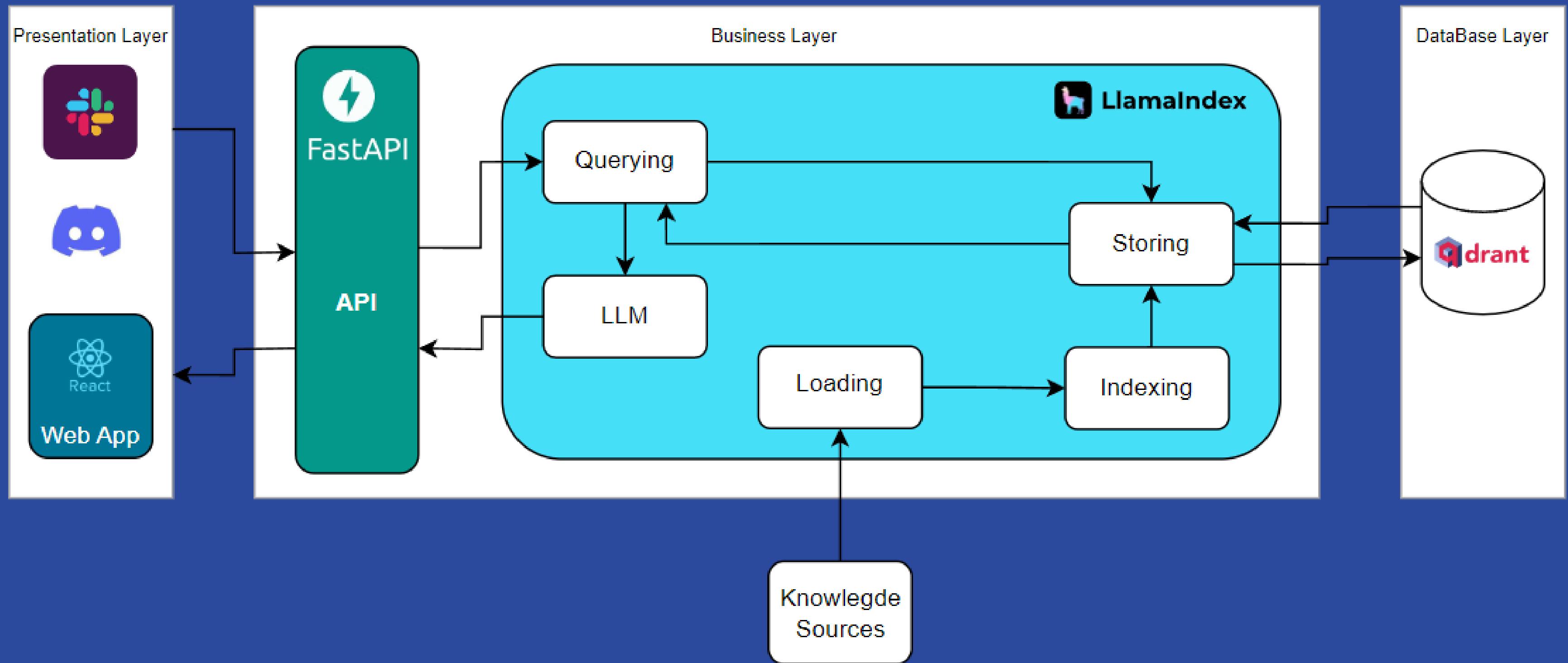


# 2

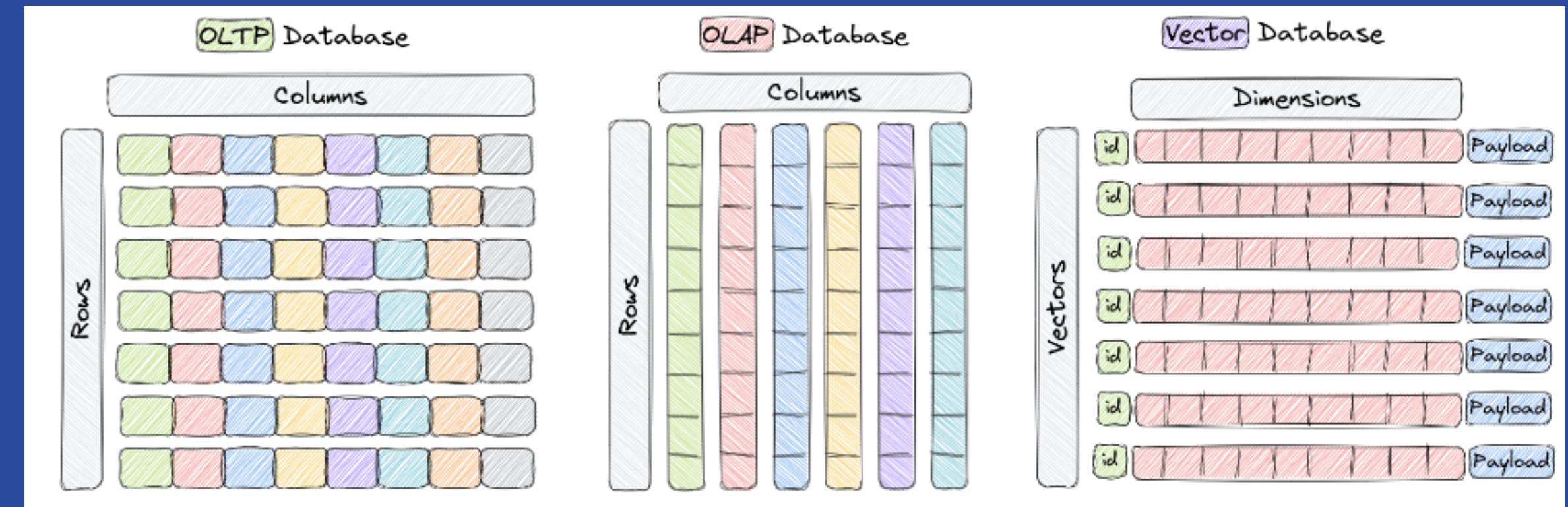
# ARCHITECTURE



# SYSTEM ARCHITECTURE



# DOMAIN MODEL



## What is Qdrant?

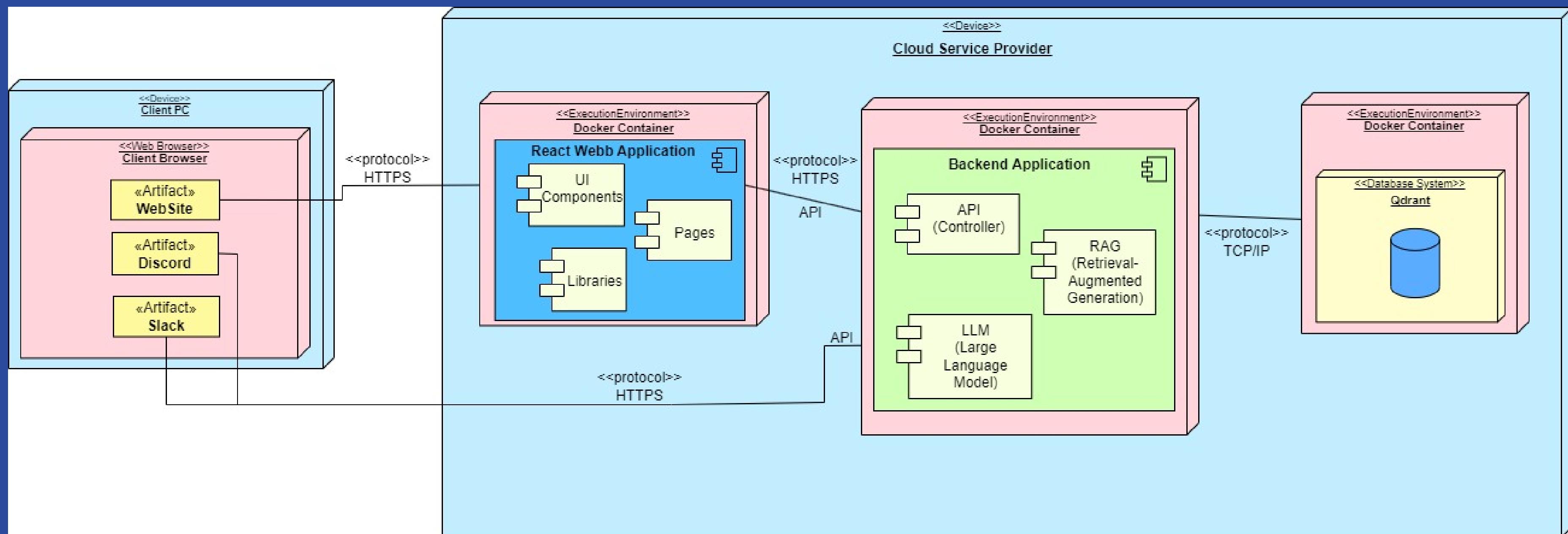
Qdrant “is a vector similarity search engine that provides a production-ready service with a convenient API to store, search, and manage points (i.e. vectors) with an additional payload.”

# DOMAIN MODEL

## Why do we need Vector Databases?

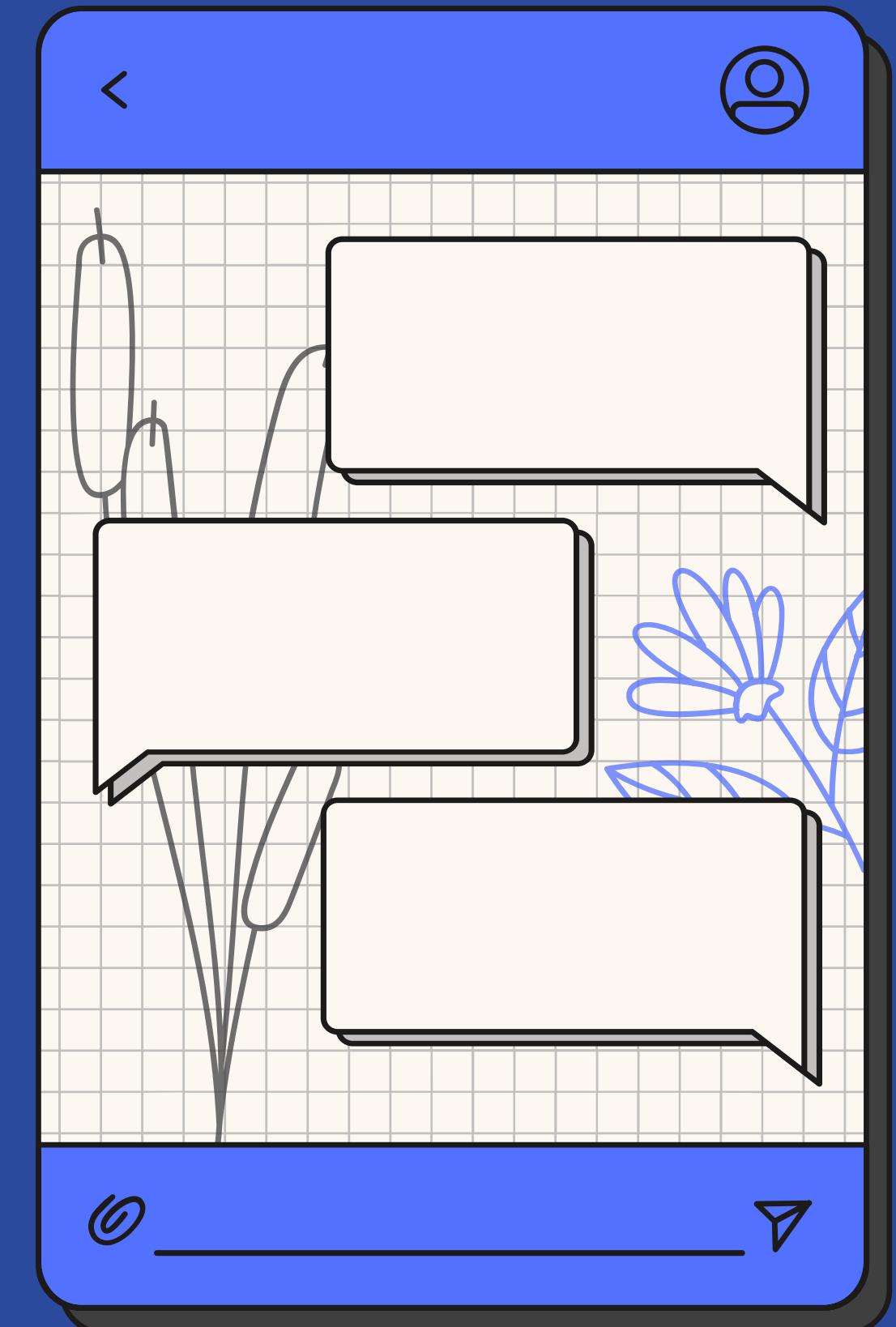
- Efficient storage and indexing of high-dimensional data.
- Ability to handle large-scale datasets with billions of data points.
- Ability to handle vectors derived from complex data types such as natural language text.
- Improved performance and reduced latency in machine learning and AI applications. Reduced development and deployment time and cost compared to building a custom solution.

# DEPLOYMENT DIAGRAM

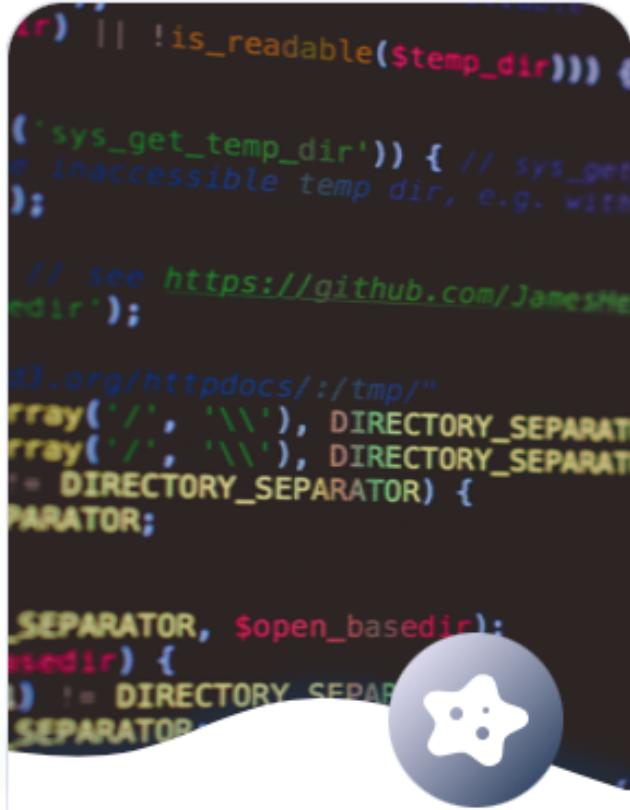


# 3

# MOCK UP

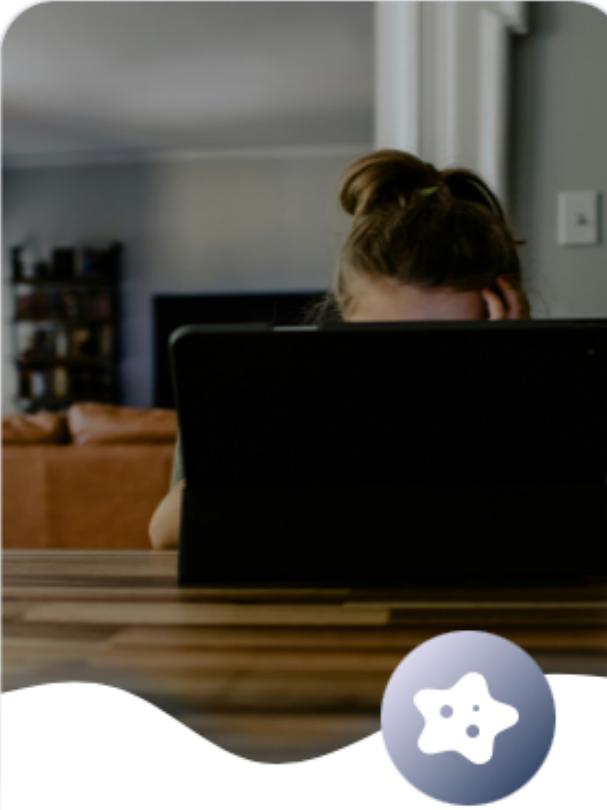


# DetiBot



## Situation

There are a wide variety of sites, portals and communication services (e.g. discord, slack, etc) that contain different types of information.



## Problem

There are too many different sources, the information is widely spread.



## Solution

Creating an agent that answers any question about the department correctly and in a natural way.

