



# **Object-oriented Analysis and Design with UML**

## **Diagrams Documentation**

This document provides an overview of various diagrams based on our project. Each diagram represents a critical aspect of the project's design, functionality, and timeline.

For reference, our project aims to develop a website that provides a wealth of information about the Paris 2024 Olympic Games.

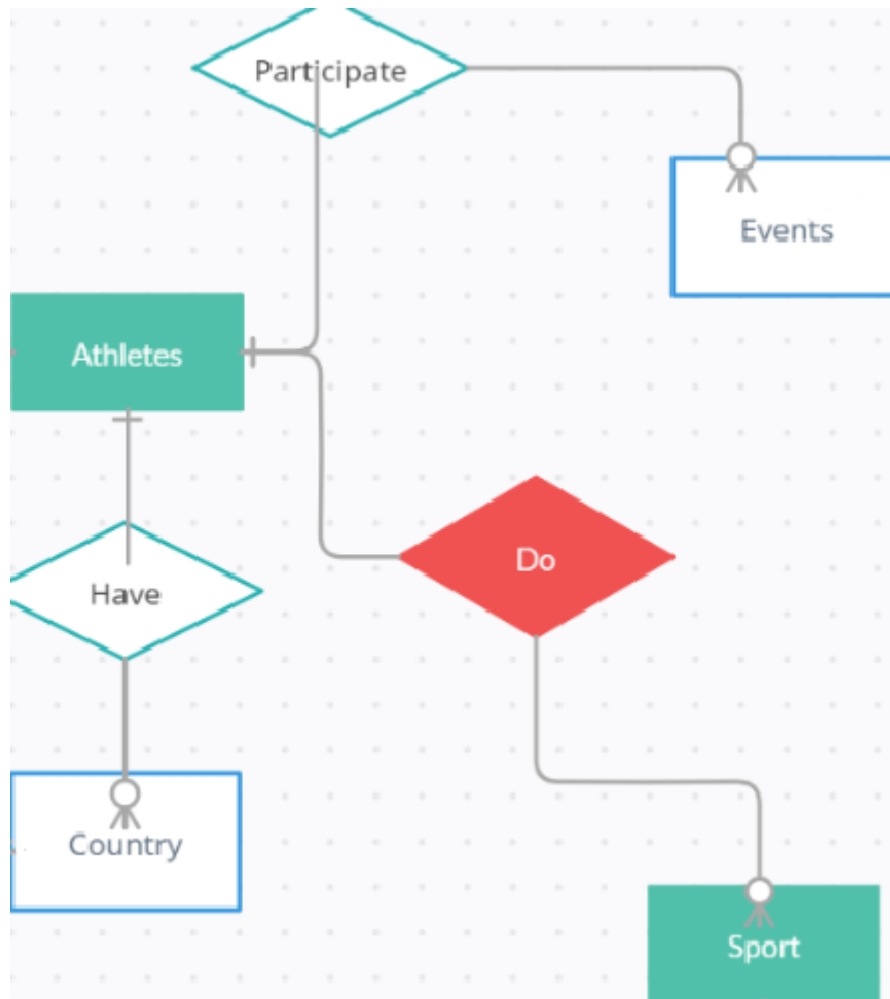
Informations and sources come from a database.

You will find below, a detailed explanation of each diagram along with its purpose.

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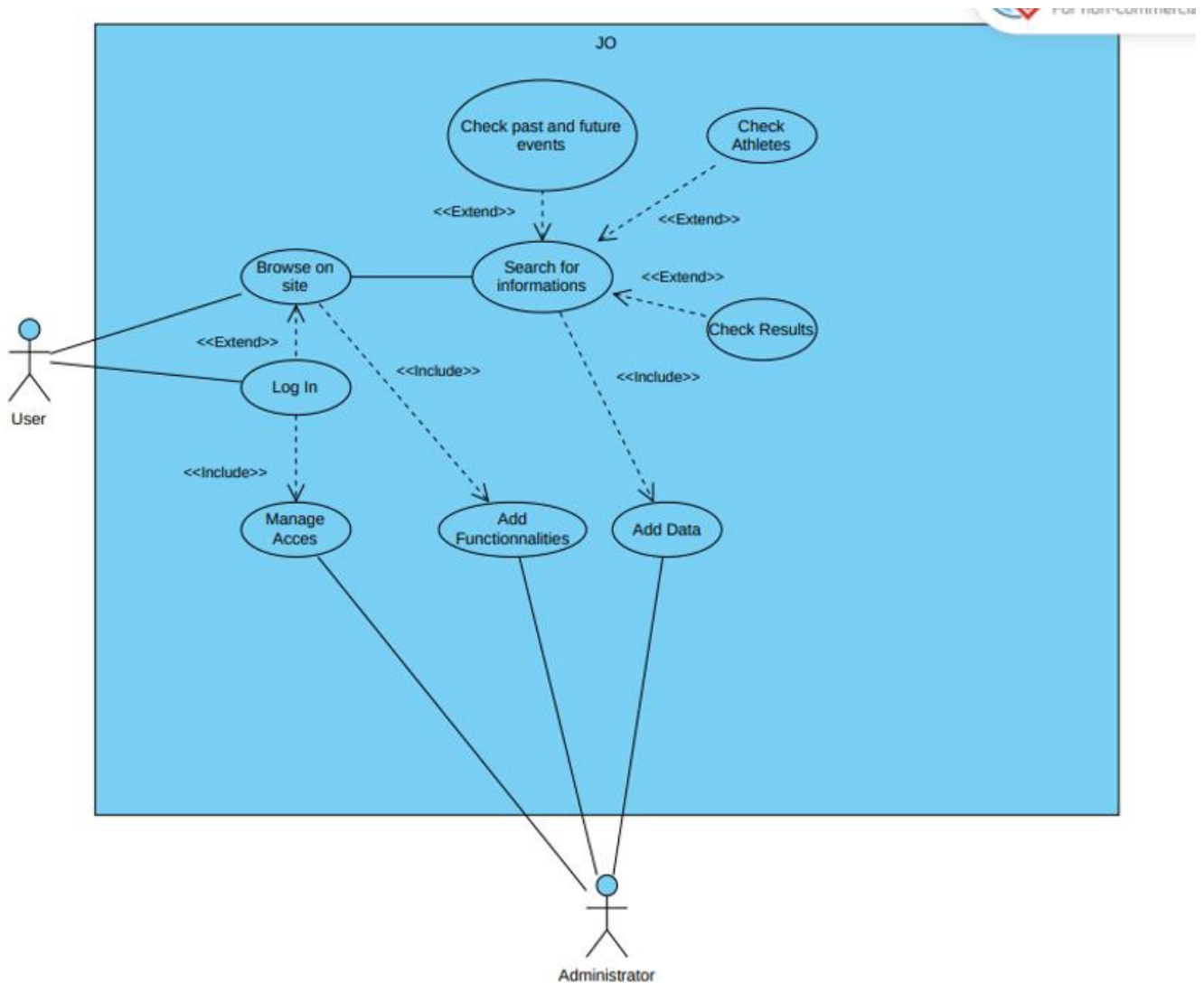
# 1. ER Diagram



This Diagram typically illustrates the relationships between our entities.

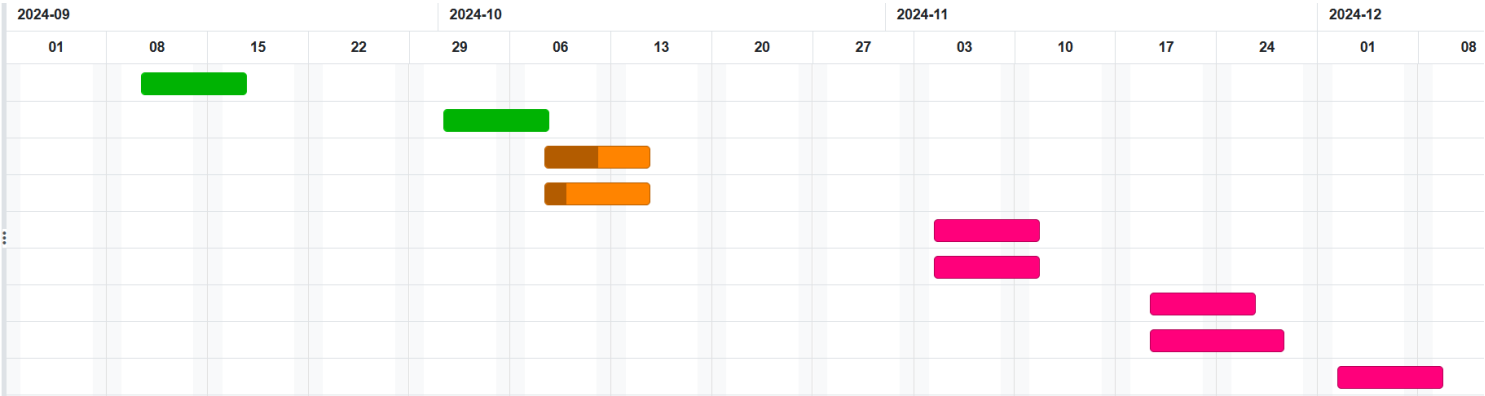
It displays entities with their attributes and relationships depicted through connecting lines.

## 2. Use Case Diagram



This Diagram represents functional interactions in our system, showing how various actors (users or administrators in our case) engage with specific functionalities of our project.

### 3. Gantt Diagram



| + Add Expand all Collapse all Zoom in Zoom out Zoom to fit |   |  |   |            |   |            |   |          |   | Search |  |
|--|---|--|---|------------|---|------------|---|----------|---|--------|--|
| ID   | : | Task Name  | : | Start      | : | End        | : | Duration | : |        |  |
| 2  | : | members, topic, structure, diagram   | : | 2024-10-01 | : | 2024-10-08 | : | 6 days   | : |        |  |
| 3  | : | Aurélien = gitignore; Luka = readme; Both = diagrams (ER, table structure) SQL (cre/ins) | : | 2024-10-08 | : | 2024-10-15 | : | 6 days   | : |        |  |
| 4  | : | Luka = frontend in git; Aurélien = 3x list page with fake JSON                           | : | 2024-10-08 | : | 2024-10-15 | : | 6 days   | : |        |  |
| 5  | : | Luka = use case diagrams; Aurélien = planned gantt                                       | : | 2024-11-04 | : | 2024-11-11 | : | 6 days   | : |        |  |
| 6  | : | Aurélien = frontend in git; CRUD fully works with fake JSON. Some skeleton in git        | : | 2024-11-04 | : | 2024-11-11 | : | 6 days   | : |        |  |
| 6  | : | Luka = activity+wireframes+sequence  | : | 2024-11-04 | : | 2024-11-11 | : | 6 days   | : |        |  |
| 7  | : | working serverside crud controllers + working frontend                                   | : | 2024-11-19 | : | 2024-11-26 | : | 6 days   | : |        |  |
| 8  | : | component+class diagrams   | : | 2024-11-19 | : | 2024-11-28 | : | 8 days   | : |        |  |
| 9  | : | working auth   | : | 2024-12-02 | : | 2024-12-09 | : | 6 days   | : |        |  |

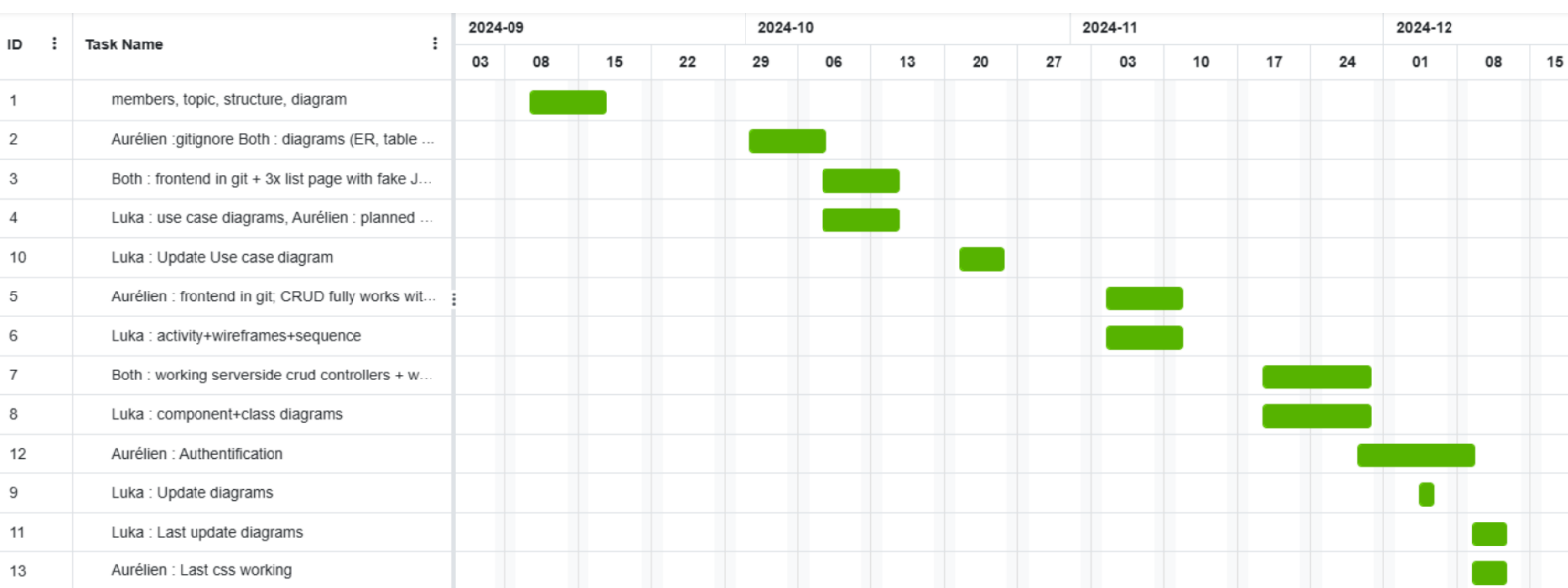
This Diagram shows our project timeline and task schedule. (At the beginning of our project)

Colors show task status evolutions.

Green = Done

Orange = Doing it

Pink = Not started



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|   | ID | Task Name   | Start      | End        | Duration | Progress % | Dependency | Resources | Color |
|---|----|---|------------|------------|----------|------------|------------|-----------|-------|
| ⋮ | 1  | members, topic, structure, diagram                    | 2024-09-10 | 2024-09-17 | 6 days   | 100        |            |           |       |
| ⋮ | 2  | Aurélien : gitignore Both : diagrams (ER, table ...   | 2024-10-01 | 2024-10-08 | 6 days   | 100        |            |           |       |
| ⋮ | 3  | Both : frontend in git + 3x list page with fake JS... | 2024-10-08 | 2024-10-15 | 6 days   | 100        |            |           |       |
| ⋮ | 4  | Luka : use case diagrams, Aurélien : planned g...     | 2024-10-08 | 2024-10-15 | 6 days   | 100        |            |           |       |
| ⋮ | 10 | Luka : Update Use case diagram                        | 2024-10-21 | 2024-10-25 | 5 days   | 100        |            |           |       |
| ⋮ | 5  | Aurélien : frontend in git; CRUD fully works wit...   | 2024-11-04 | 2024-11-11 | 6 days   | 100        |            |           |       |
| ⋮ | 6  | Luka : activity+wireframes+sequence                   | 2024-11-04 | 2024-11-11 | 6 days   | 100        |            |           |       |
| ⋮ | 7  | Both : working serverside crud controllers + wo...    | 2024-11-19 | 2024-11-29 | 9 days   | 100        |            |           |       |
| ⋮ | 8  | Luka : component+class diagrams                       | 2024-11-19 | 2024-11-29 | 9 days   | 100        |            |           |       |
| ⋮ | 12 | Aurélien : Authentification                           | 2024-11-28 | 2024-12-09 | 8 days   | 100        |            |           |       |
| ⋮ | 9  | Luka : Update diagrams                                | 2024-12-04 | 2024-12-05 | 2 days   | 100        |            |           |       |
| ⋮ | 8  | Luka : component+class diagrams                       | 2024-11-19 | 2024-11-29 | 9 days   | 100        |            |           |       |
| ⋮ | 12 | Aurélien : Authentification                           | 2024-11-28 | 2024-12-09 | 8 days   | 100        |            |           |       |
| ⋮ | 9  | Luka : Update diagrams                                | 2024-12-04 | 2024-12-05 | 2 days   | 100        |            |           |       |
| ⋮ | 11 | Luka : Last update diagrams                           | 2024-12-09 | 2024-12-12 | 4 days   | 100        |            |           |       |
| ⋮ | 13 | Aurélien : Last css working                           | 2024-12-09 | 2024-12-12 | 4 days   | 100        |            |           |       |

This one, schedule our project until the end.

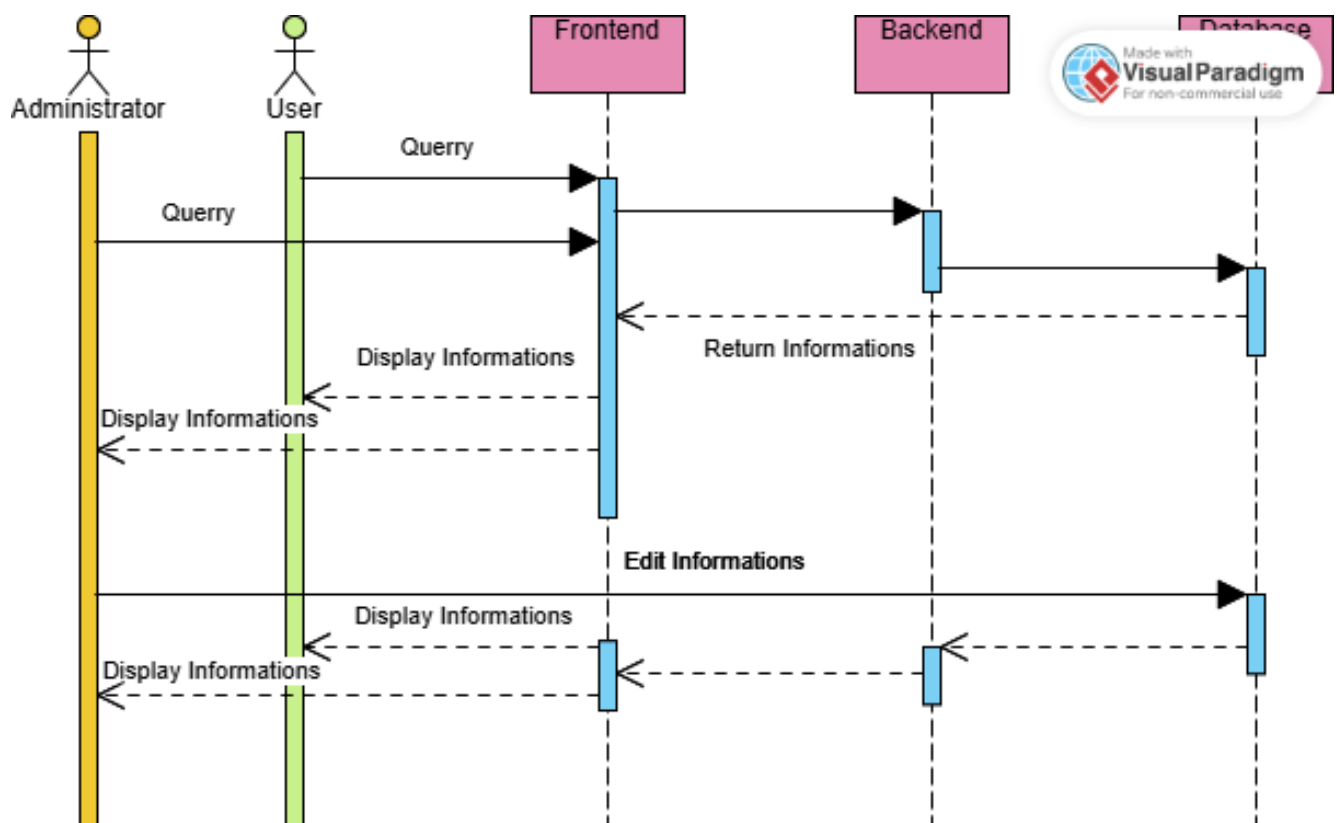
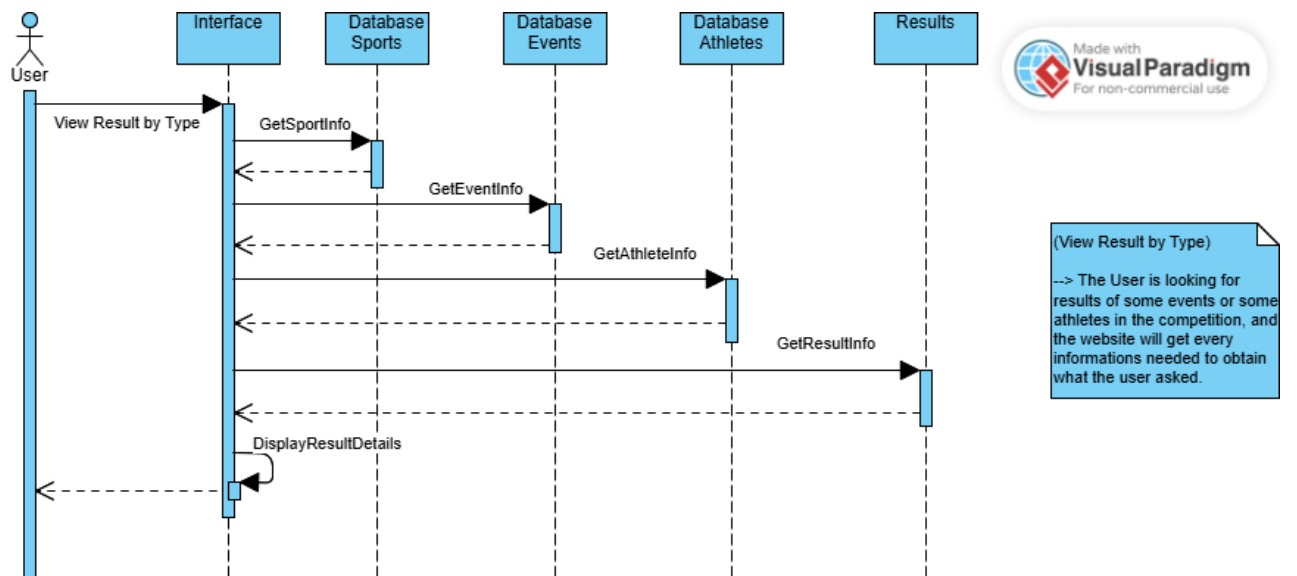
Again, the colors show changes in task status (although you will probably only see a green color because the tasks are now completed).

Green = Done

Orange = Doing it

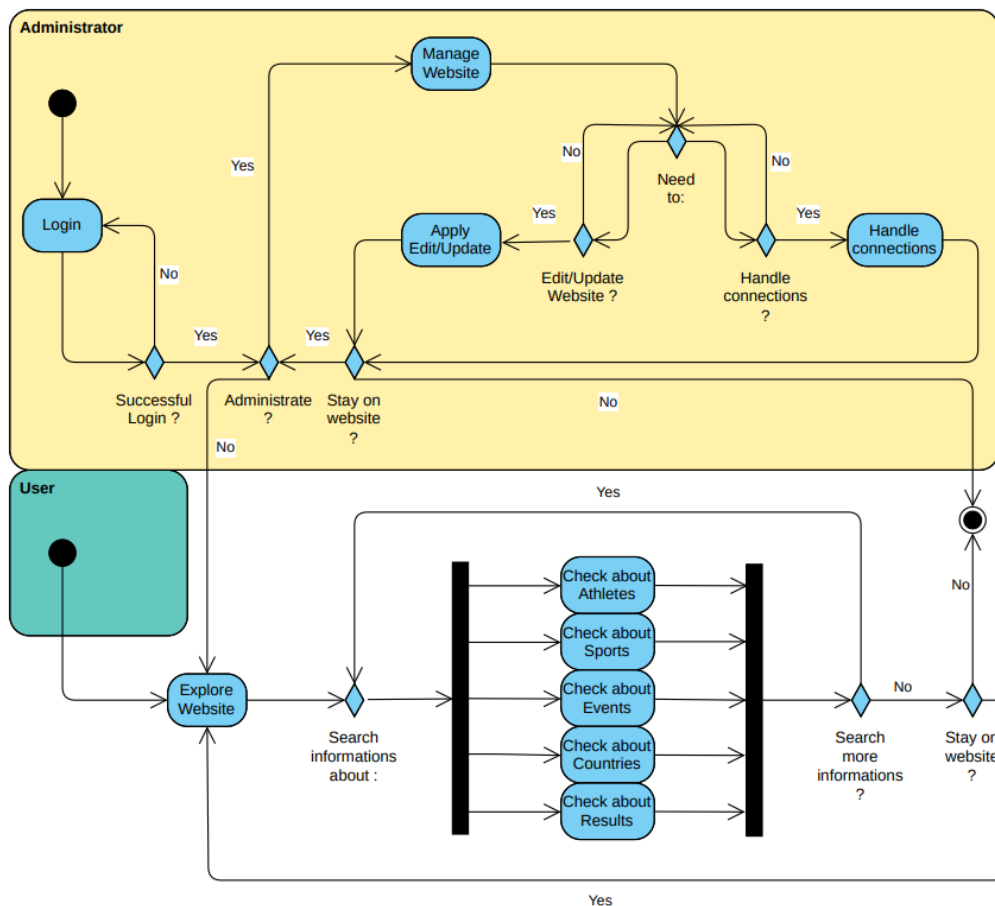
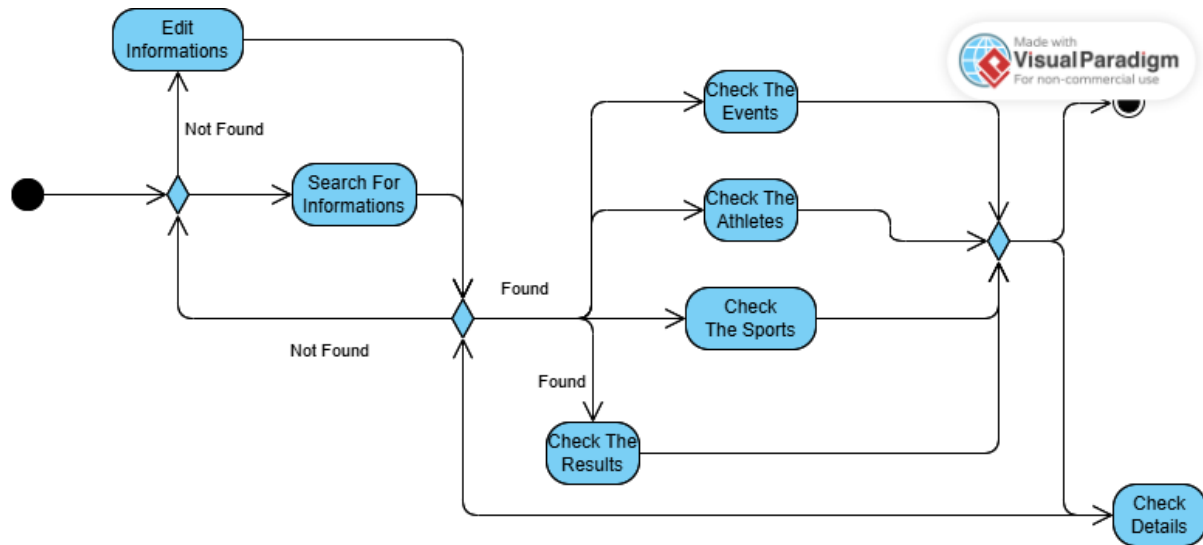
Pink = Not started

## 4. Sequence Diagram



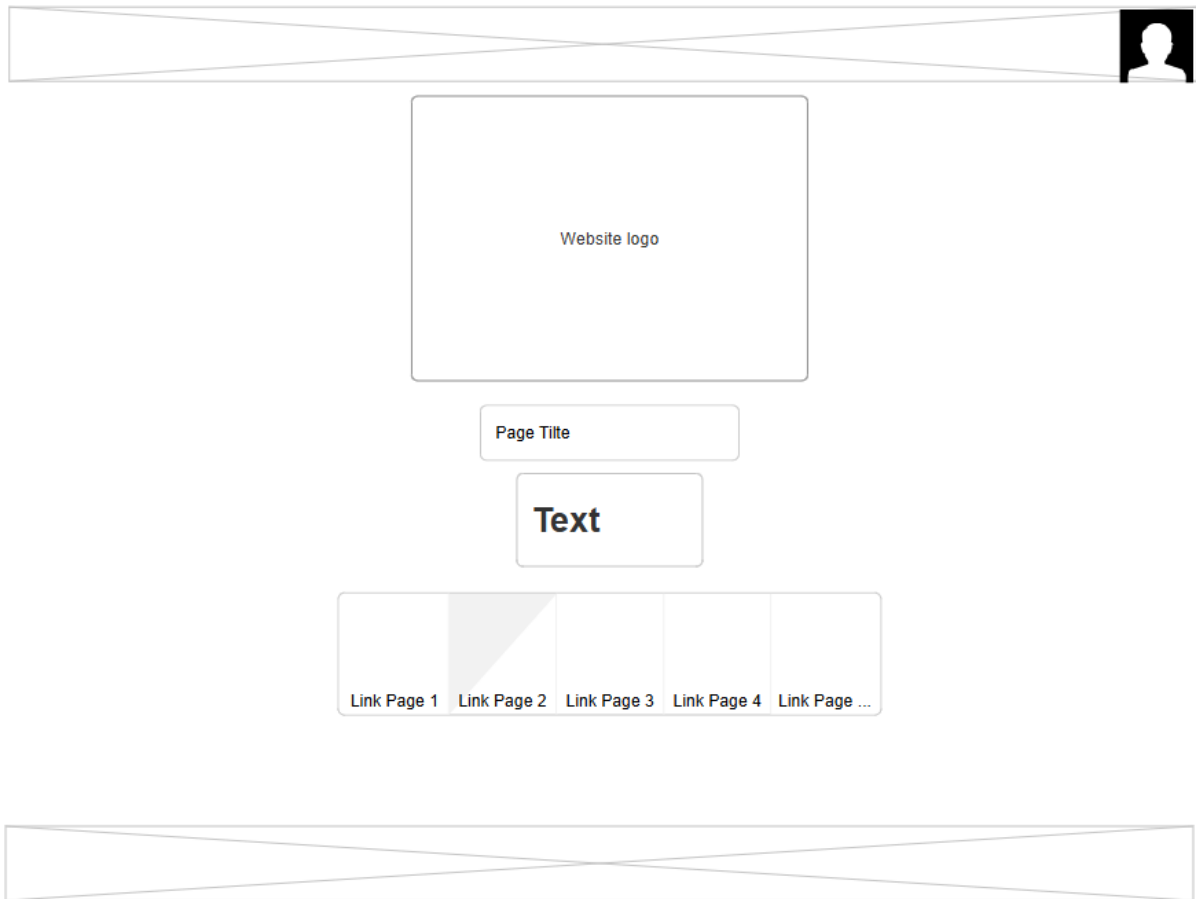
This Diagram represents how objects in our system interact in a time-sequenced manner, detailing the flow of messages between components.

## 5. Activity Diagram



This Diagrams are some flowcharts describing workflows in a system, illustrating processes, decisions, and parallel activities.

## 6. Wireframe Diagram

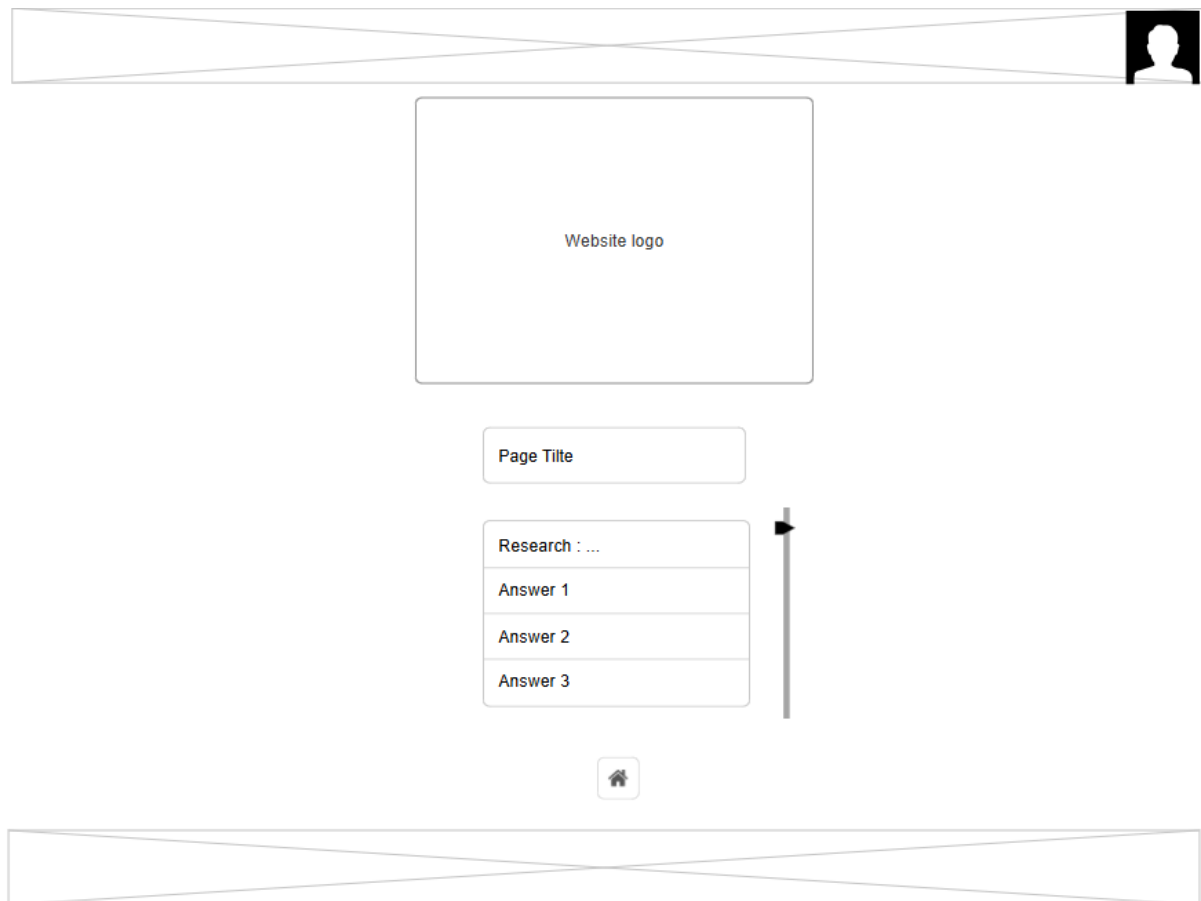


This Diagram represents a skeletal blueprint of our webpage, focusing on layout and functionality without visual design.

This first page represents a sketch of our Home Page.

After connecting or not, the user will be able to access our other pages by clicking on a link in the middle of the page.

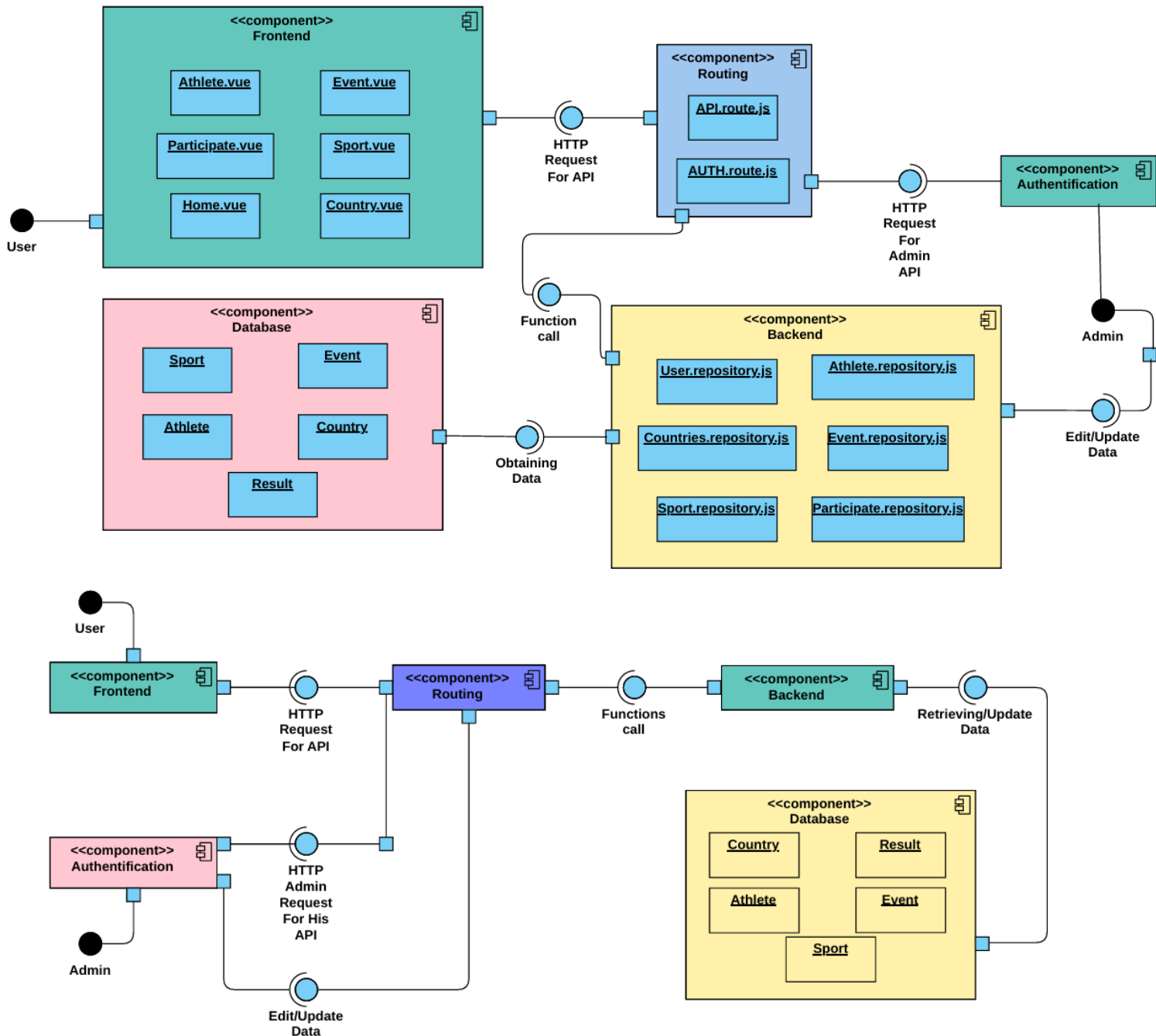




This second page represents typical research means for the user.

He'll be able to access information provided by the Database that will be displayed in small windows on his screen.

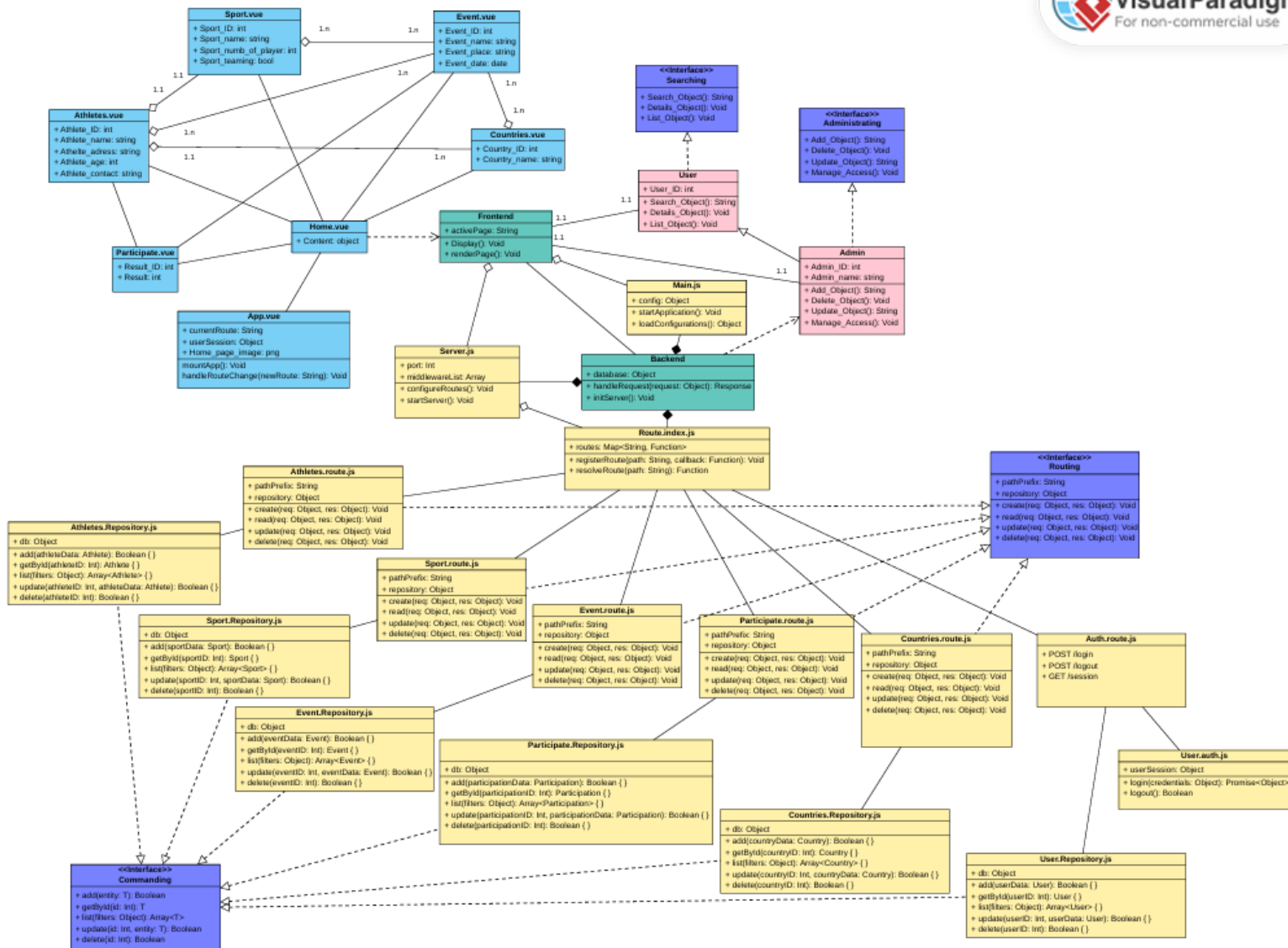
## 7. Component Diagrams



This Diagrams provide some high-level view of the system's architecture by depicting its components and their relationships.

Components represent modular parts of our system.

## 8. Class Diagram



This diagram is another detailed structural representation for object-oriented design of our project.

It includes the definition of our classes, their attributes, their methods, and the relationships between them, helping visualize our overall system organization.

## **Conclusion**

This document provides a comprehensive overview of our project's design and structure.

The diagrams included here are essential for understanding our project's functionalities and development timeline.

You will also find outside this documentation, pdf files, for diagrams such as the Gantt as well as the Class, to see more information (because of their size).