

Introduction



A1.1 Learning Activity

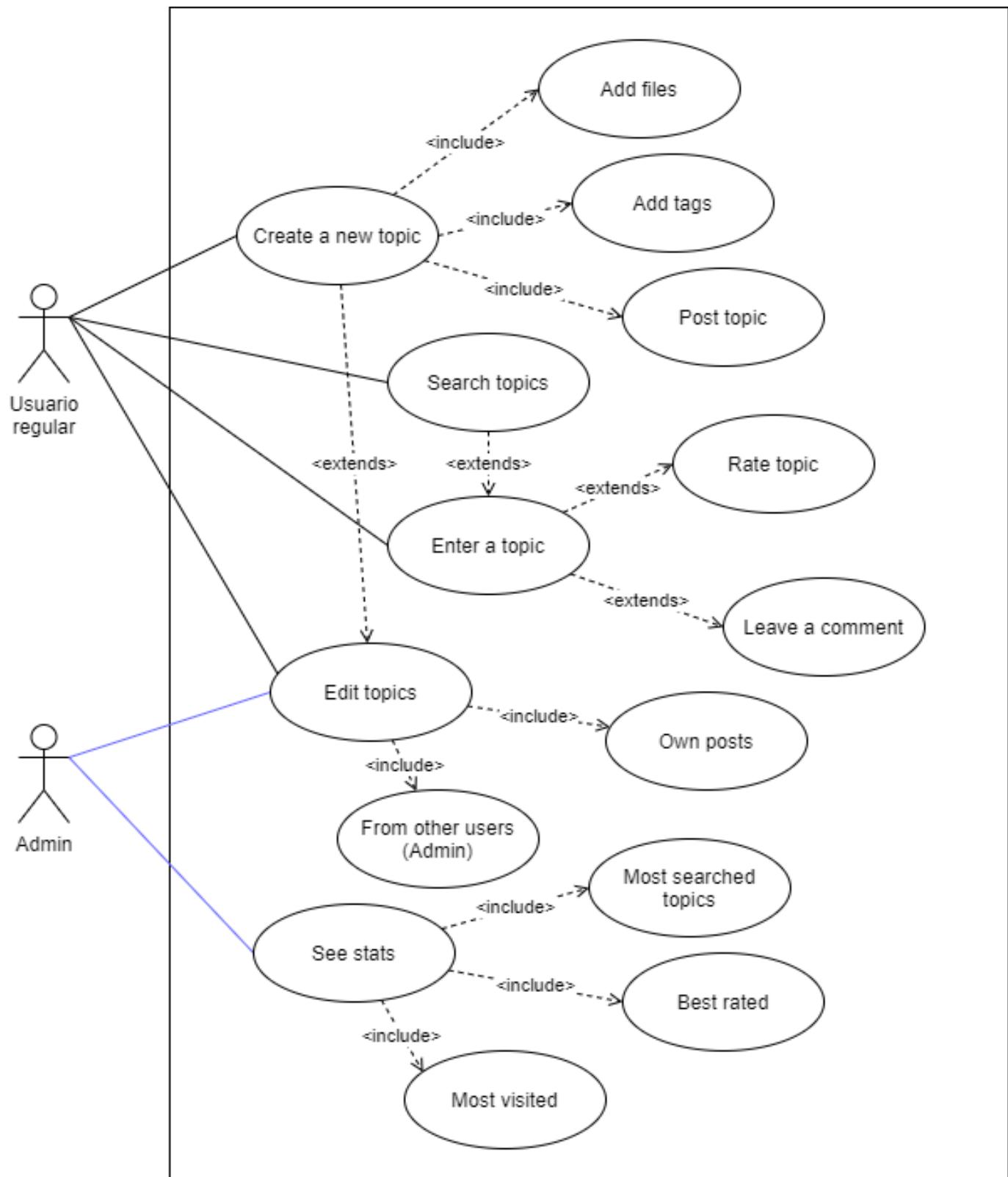
Modeling requirements through UML diagrams



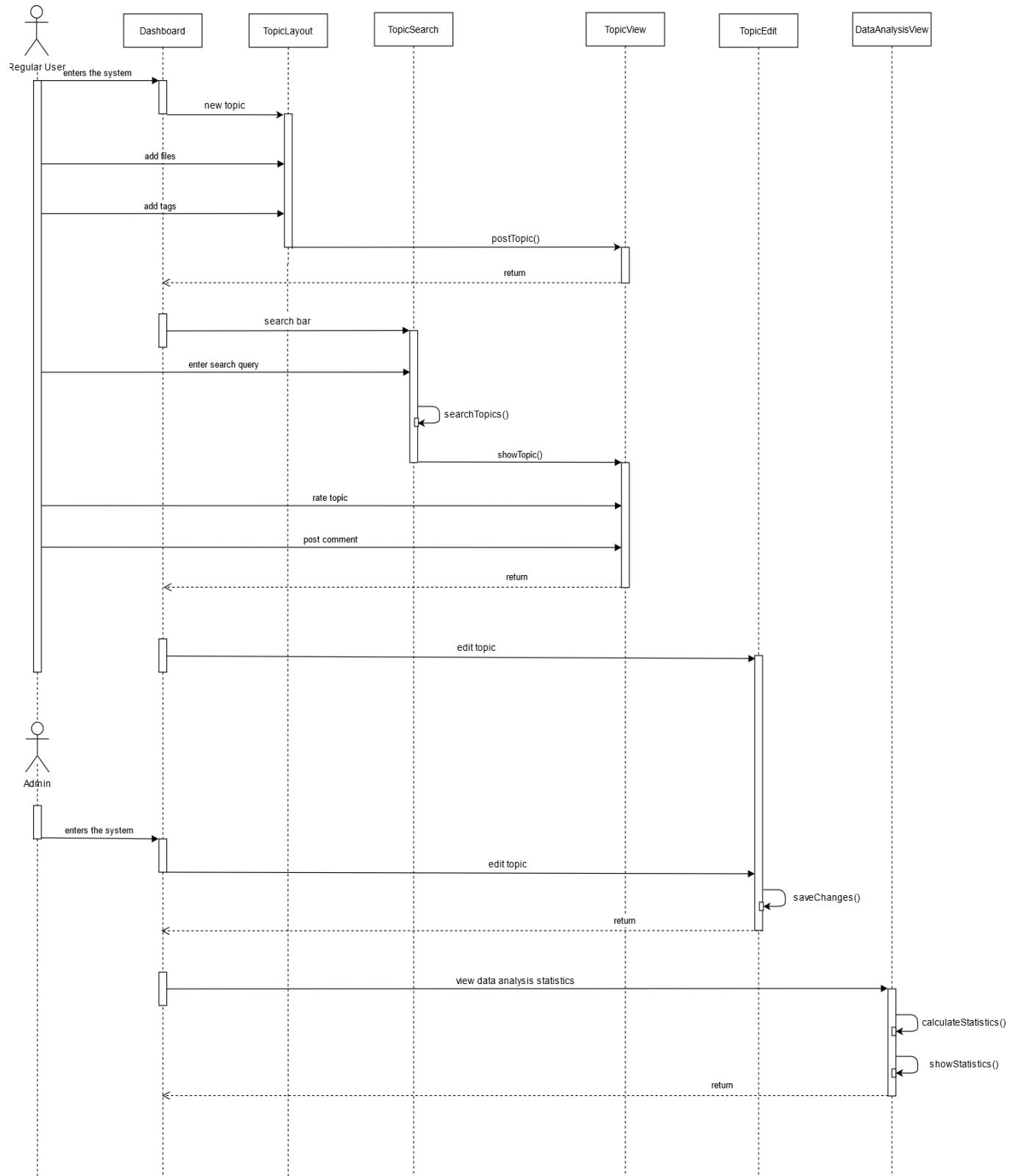
Development

1. Based on each of the user and system requirements set out above for the case study, draft the requested modeling diagrams:
 - A diagram that contains the relationships between the different use cases, only for the scenario in which the users interact with the system making use of the main or central functions according to each case study. (Include at least 5 elements of the diagram)
 - The sequence diagram that explains the communication between the different GUIs for the use cases of the previous point, considering that the user has already successfully entered the system. (Include at least 5 elements of the diagram)
 - The class diagram for the objects to be instantiated, for the points mentioned above. (Include at least 5 elements of the diagram)
 - A package diagram containing the component diagrams and the relationships between the database, user interfaces, controllers, or middleware. (Include at least 3 elements of the diagram)
 - The distribution diagrams representing the physical structure of the system such as physical infrastructure, networks, storage and web services, firewall, mobile devices or any other physical resource that will be part of the system. (Include at least 3 elements of the diagram)

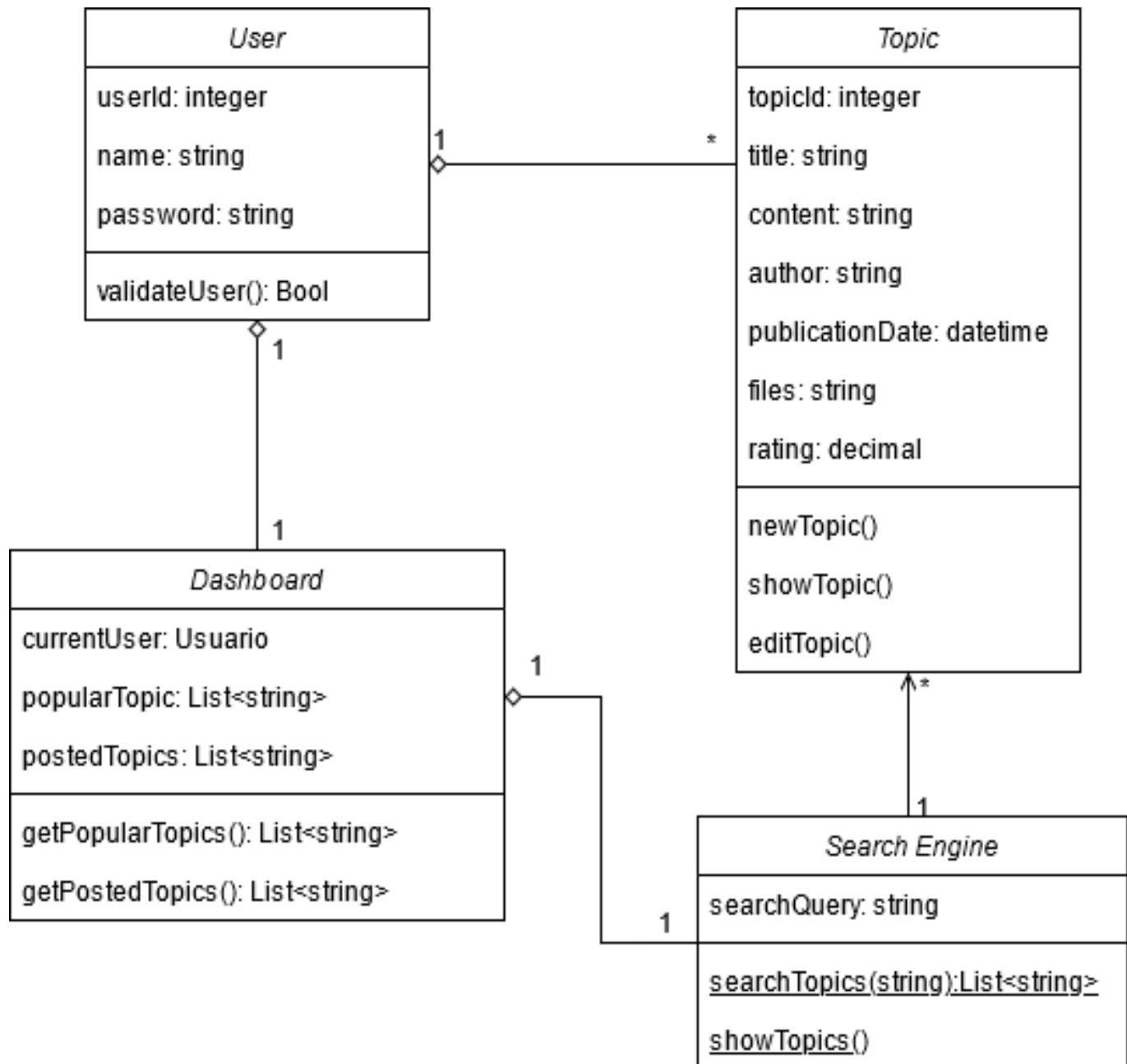
Use case diagram



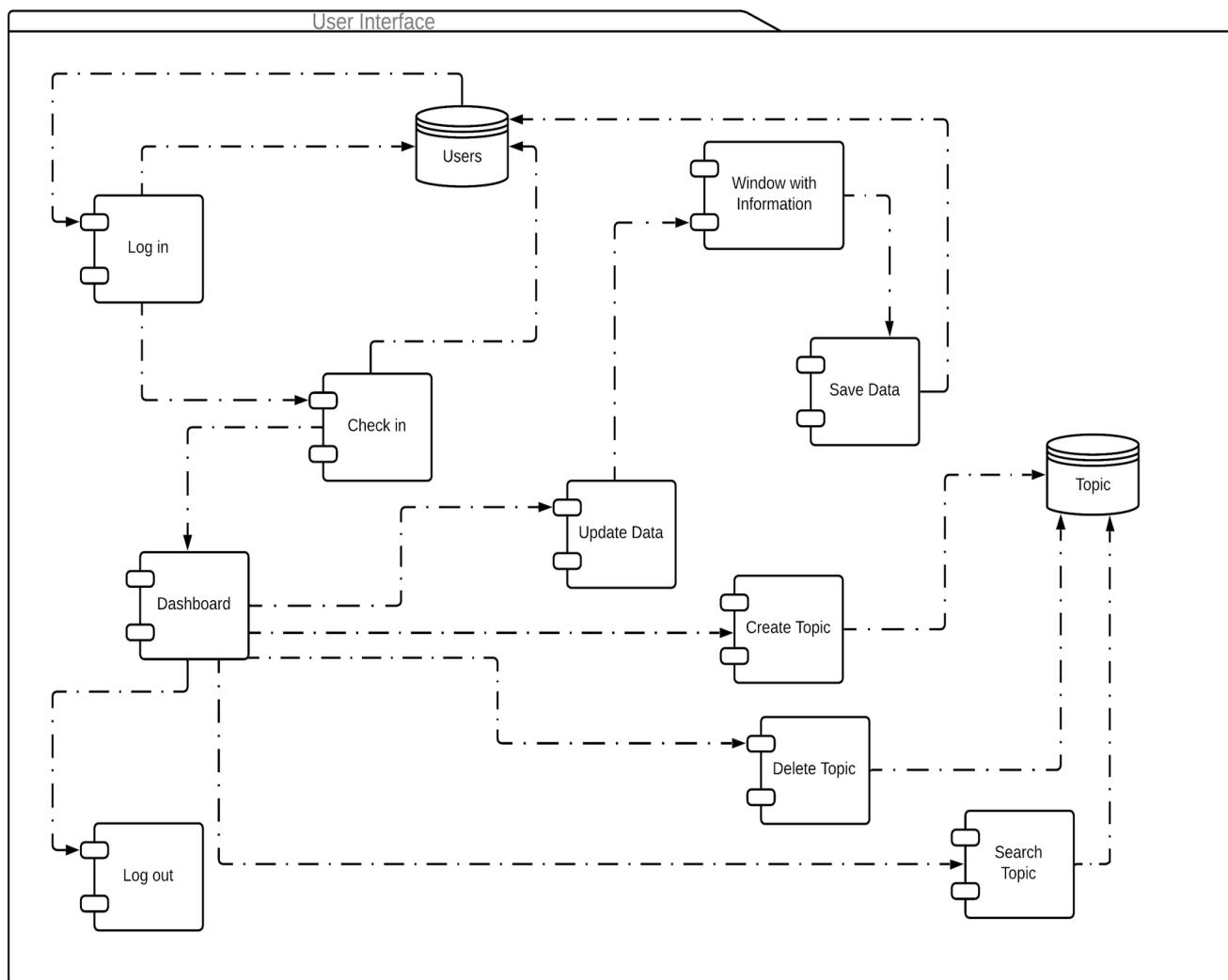
Sequence diagram



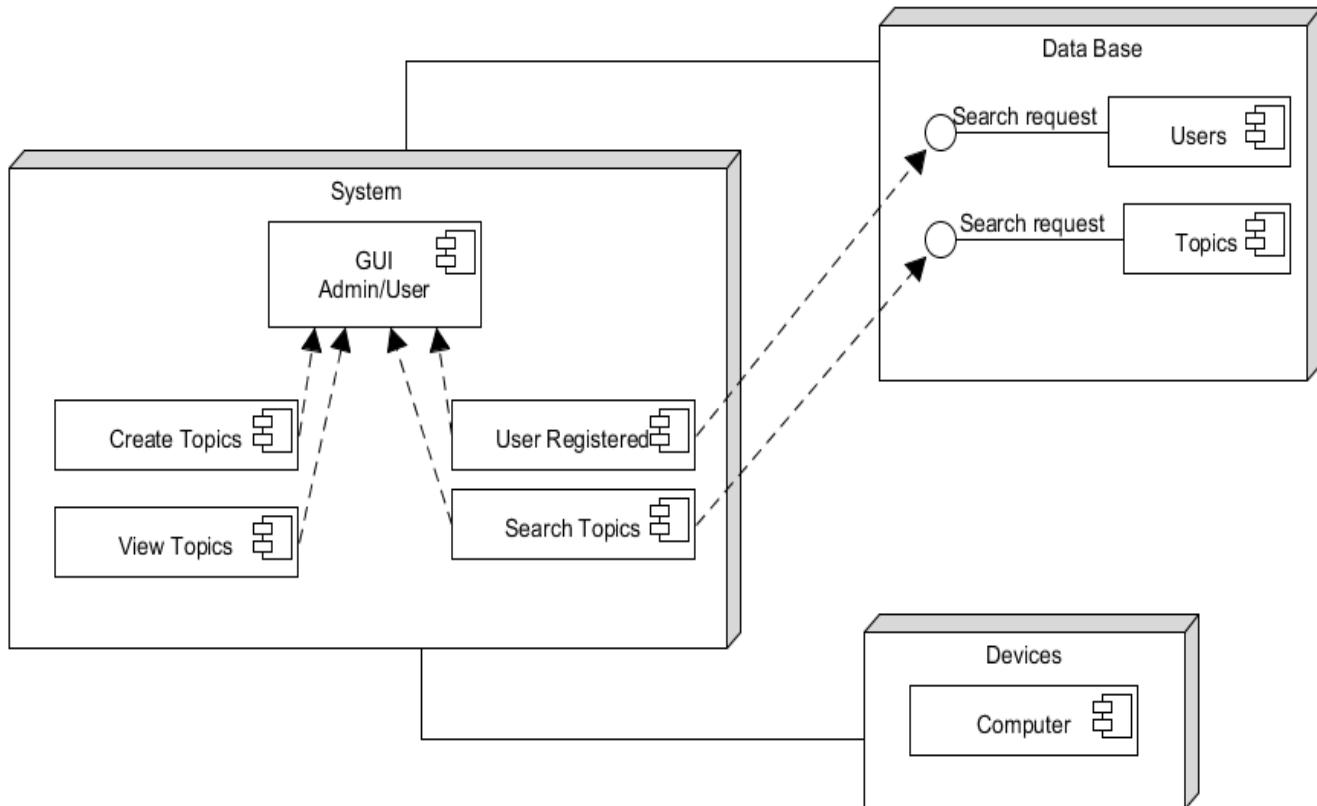
Class diagram



Components Diagram



Distribution diagram



Conclusions

Cota Villa Edy Jesus Manuel

In this activity we make various diagrams that fulfill the function of detailing the structure and interactions of the application that we are going to develop for the conservation of knowledge, the diagrams allow us to understand the interactions that the different users are going to carry out with the software, as well as to see how the information flows both ways, the one that the user provides to the system, as well as the one that the system provides to the user, regardless, the design of these diagrams to allow both programmers and customers to understand the ins and outs of the system that will be developed and that's pretty cool c:

Jaramillo Regino Hector Armando

In this activity we made diagrams based on the case study, they were distributed among the work team. One of the complicated parts of the activity was the creation of the diagram itself, since in addition to maintaining the format with the elements when adapting it to the business model, we had some doubts. Personally, the sequence diagram was the most complicated of all and we do not know exactly what sequence the program will follow, so we try to make one as close as possible.

Dehesa Zazueta Rigel Alioth

The diagrams applied helped us modulate different aspects of the project for a better understanding of its functionality. Mainly the sequence diagram that describes the sequence of steps that the user can take while using the system; showing potential sequence errors that may happen, complemented by the use case and class diagrams.

Morales Arismendi Cristhian Antonio

During the development of the diagrams I learned how to apply each one of them within our own project and how to develop each one of them, which in reality I had no knowledge of all the ones that the teacher presented to us in class. This helped me to find some more specific to each project. Each of the elements that make up the UML diagrams are necessary to be able to project what we really want to understand.

Reunion Evidence

HECTOR ARMANDO JARAMILLO REGINO is presenting

Distribution diagram

```

classDiagram
    class System {
        GUI Admin/User
        Create Topics
        User Registered
        View Topics
    }
    class DataBase {
        Users
        Topics
    }
    System "2-->" DataBase : Search request
    View Topics "2-->" DataBase : Search request
  
```

The screenshot shows a Visual Studio Code window displaying a UML distribution diagram. The left pane shows a file tree with various UML models and diagrams. The main pane displays the distribution diagram with components like 'System' and 'Data Base'. The right pane shows the code for the distribution diagram.

Rubric

Criteria	Description	Score
Instructions	Is each of the points indicated in the Instructions section fulfilled?	10
Development	Was each one of the points requested within the development of the activity answered?	60
Demonstration	Does the student introduce himself during the explanation of the functionality of the activity?	20
Conclusions	Is a personal opinion of the activity included by each of the team members?	10

Links

Cota Villa Edy Jesus Manuel

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Jaramillo Regino Hector Armando

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