

Introduction



A1.1 Learning activity

Requirements modeling through UML diagrams



Instructions

- Based on the document provided by the advisor and other sources of consultation, make the diagrams indicated in the development for the case study that has been reviewed during the subject.
- Use the same tools from past challenges, such as drawio, or others that allow you to create the diagrams or images that illustrate the concept.
- The team will explain what this type of diagram represents, what elements make it up, as well as its interpretation within the case study.
- Any activity or challenge must be done using the Markdown style with .md extension and the environment VSCode development, or you can use a platform for example Notion, and must be elaborated as a single page document, that is, if the document has images, links or any document external must be accessed from tags and links, and must be named with the nomenclature A1.1_ActivityName_StudentName.pdf.
- It is a requirement that the .MD contains a tag of the link to the repository of your document in GITHUB, for Example Link to my GitHub and at the end of the challenge it should be uploaded to github.
- From the .md file export a .pdf file that must be uploaded to classroom within its section corresponding, serving as evidence of its delivery, since being the official platform here it is you will receive the grade of your activity.
- Considering that the .PDF file, which was obtained from the .MD file, both must be identical.
- Your repository in addition to having a readme.md file inside your root directory, with the information such as student data, work team, subject, career, advisor data, and even logo or images, must have a section of contents or index, which are really links or links to your .md documents, avoid using text to indicate internal or external links.
- A structure is proposed as indicated below, however, any other that you can use can be used. support to organize your repository.

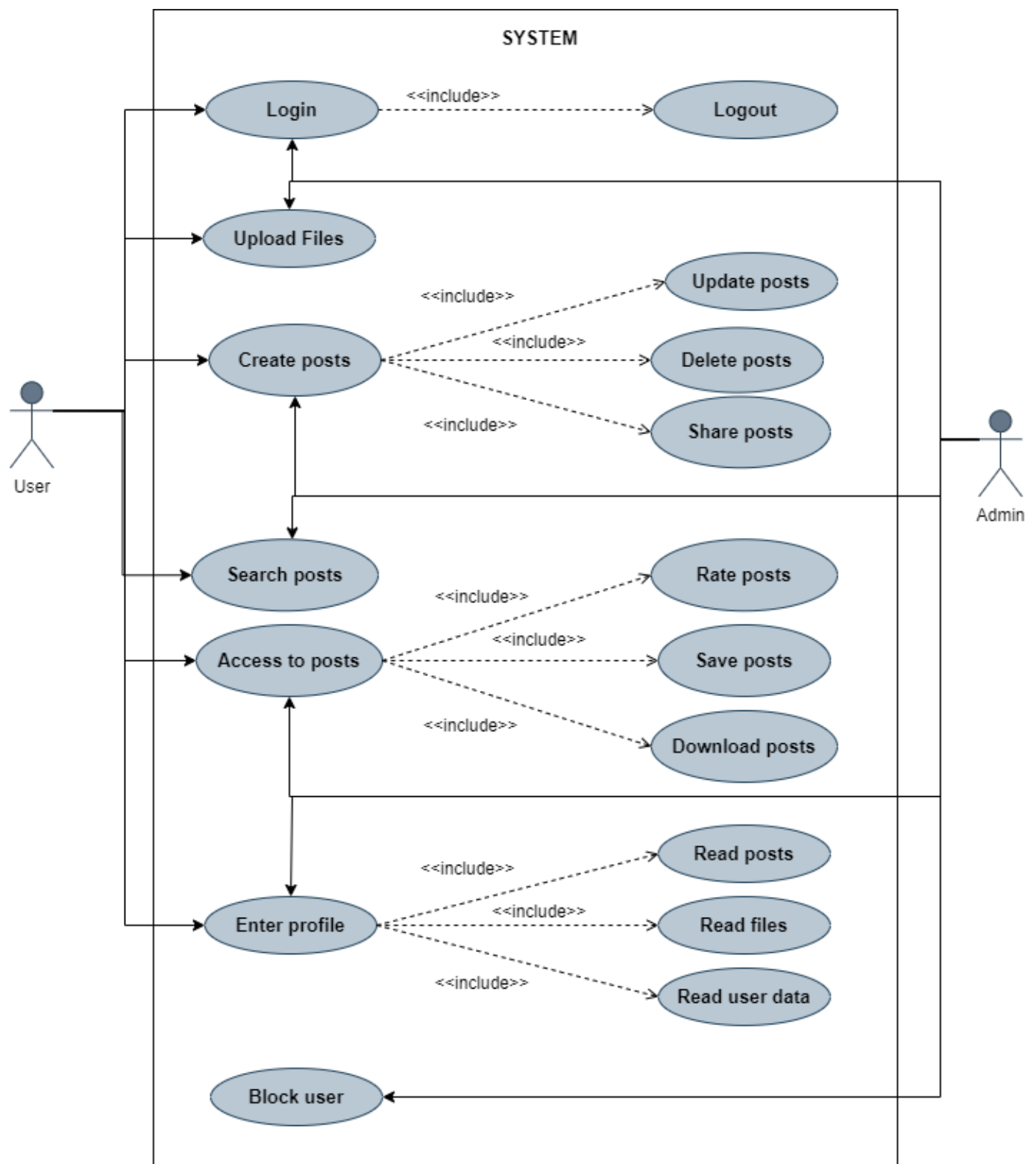
```
| readme.md
| | blog
| | | Cx.1_NombredelaActividad.md
| | | Ax.1_NombredelaActividad.md
| | diagrams
| | docs
| | html
```

| | img
| | pdf



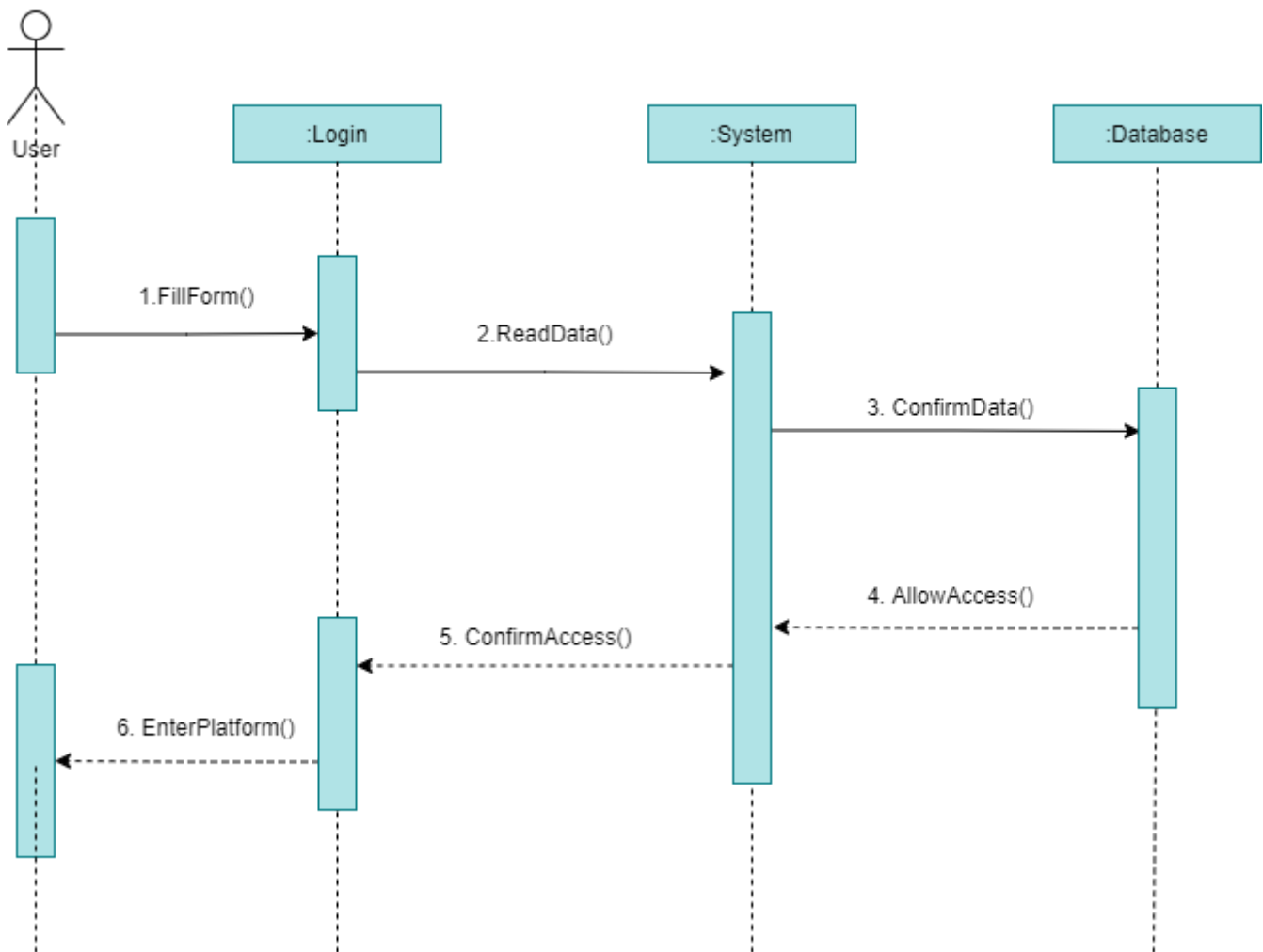
Development

1. Based on each of the user and system requirements established above for the case study, write the requested modeling diagrams:
 - A diagram containing the relationships between the different use cases, only for the scenario in which the user interacts 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 as minimum 5 elements of the diagram)
 - The class diagrams for the objects to be instantiated, for the aforementioned points. (Include at least 5 elements of the diagram)
 - A package diagram containing the component diagrams and the relationships between the database data, user interfaces, controllers or intermediate layers - middleware. (Include at least 3 diagram elements)
 - Distribution diagrams representing the physical structure of the system as can infrastructure physical, networks, storage and web servers, firewall, mobile devices or any other resource physical that will be part of the system. (Include at least 3 elements of the diagram)
 - ***Use cases diagram:***

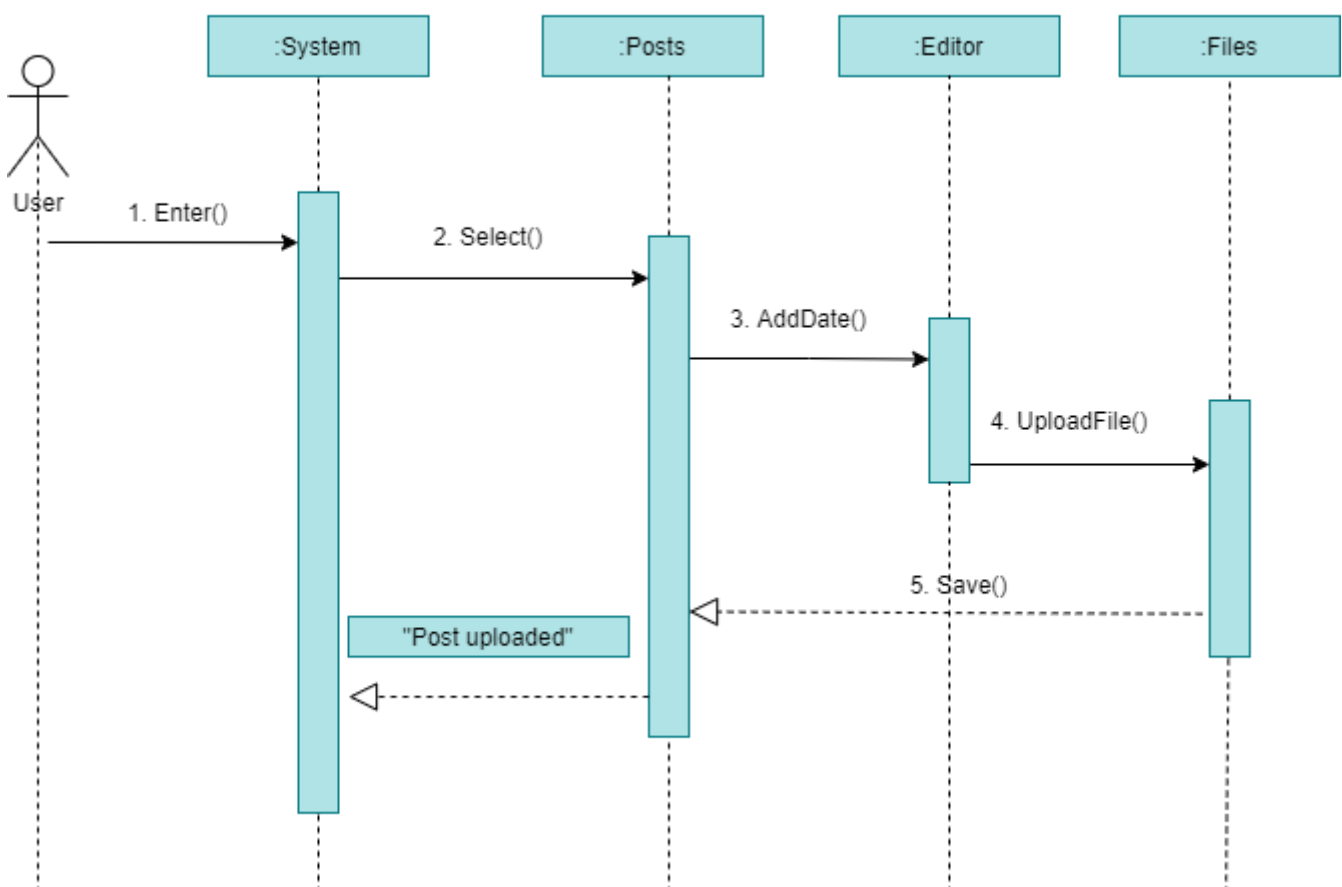


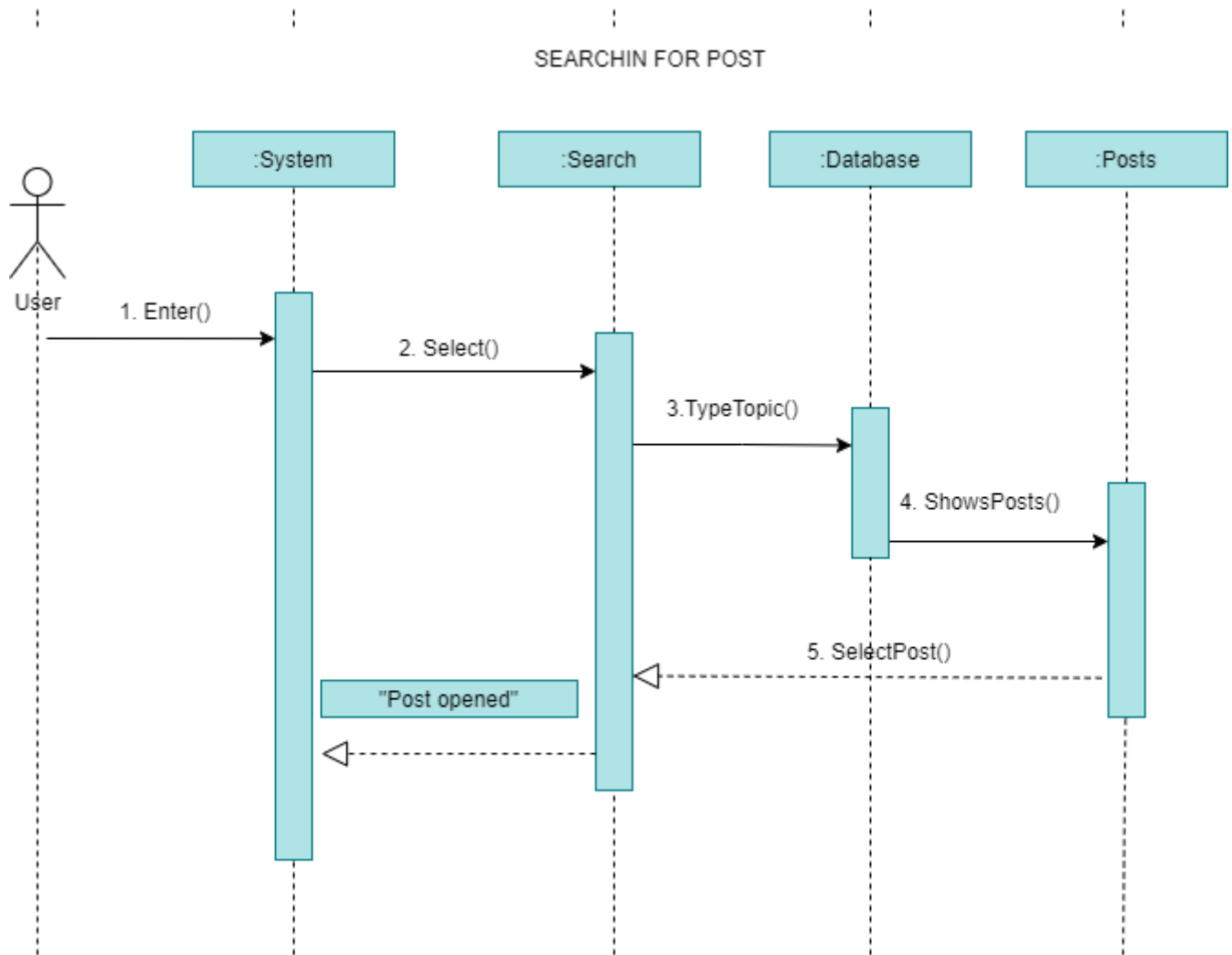
- **Sequence diagram:**

USER LOGIN

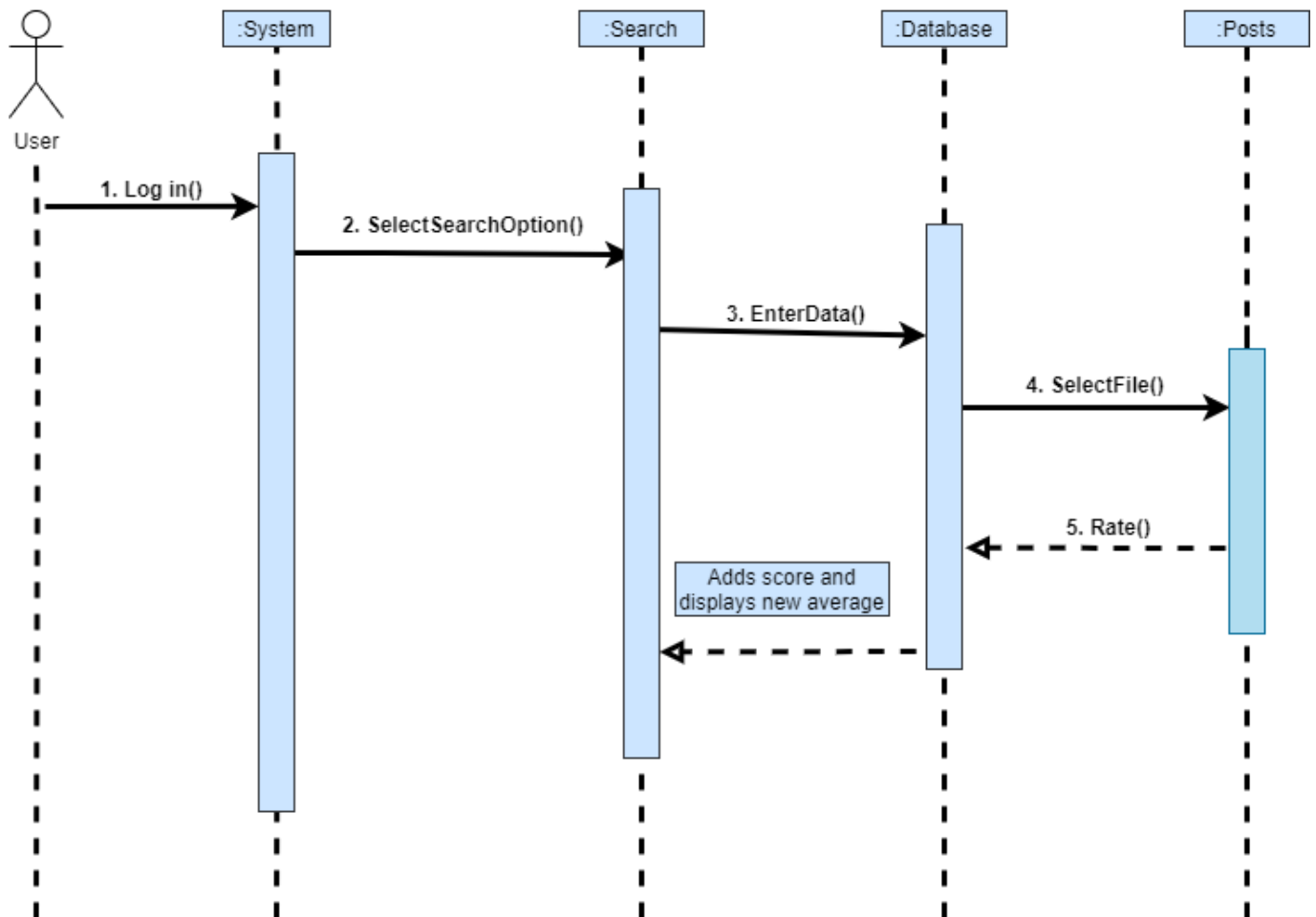


POST CREATION

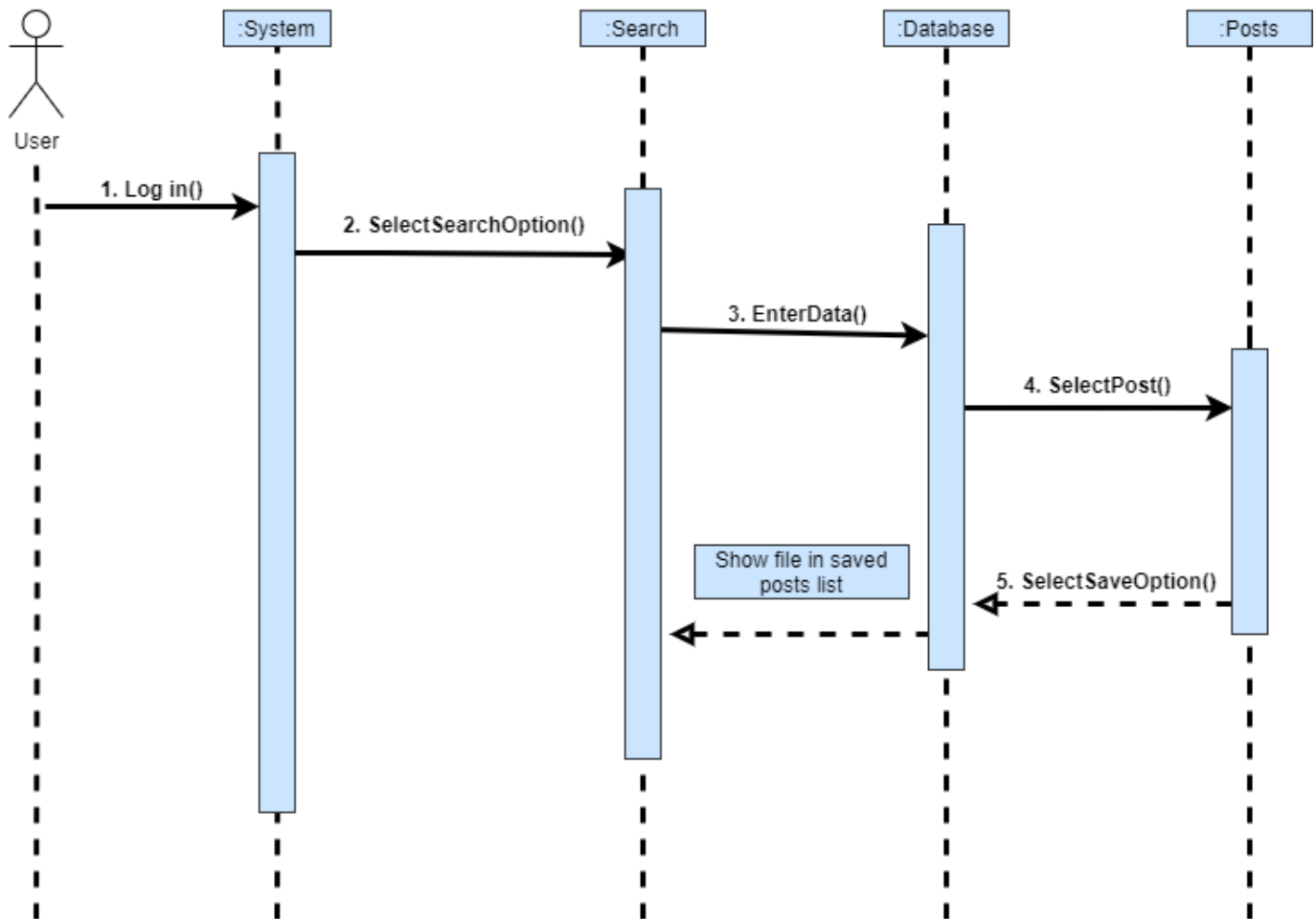




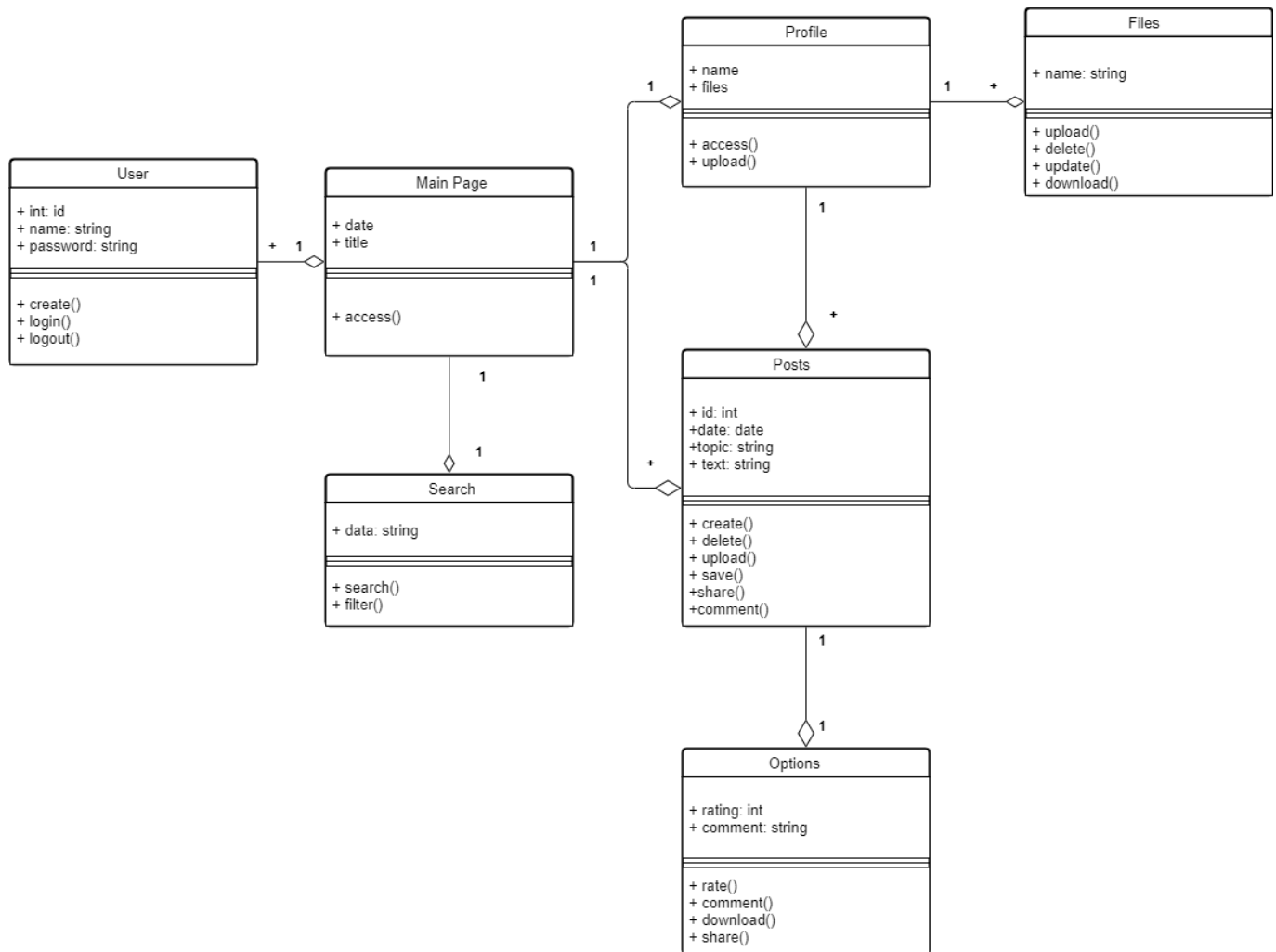
RATE POST



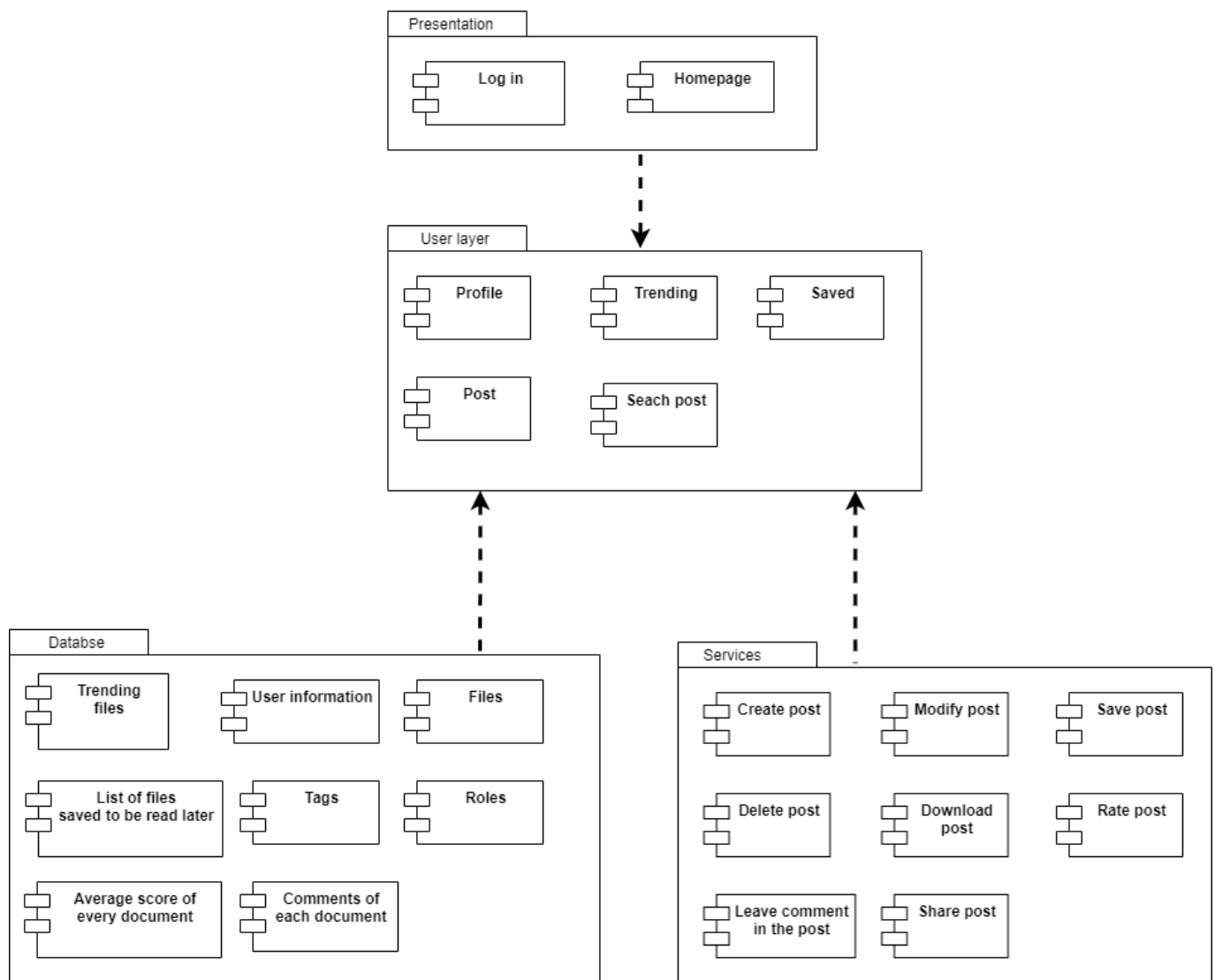
SAVE POST



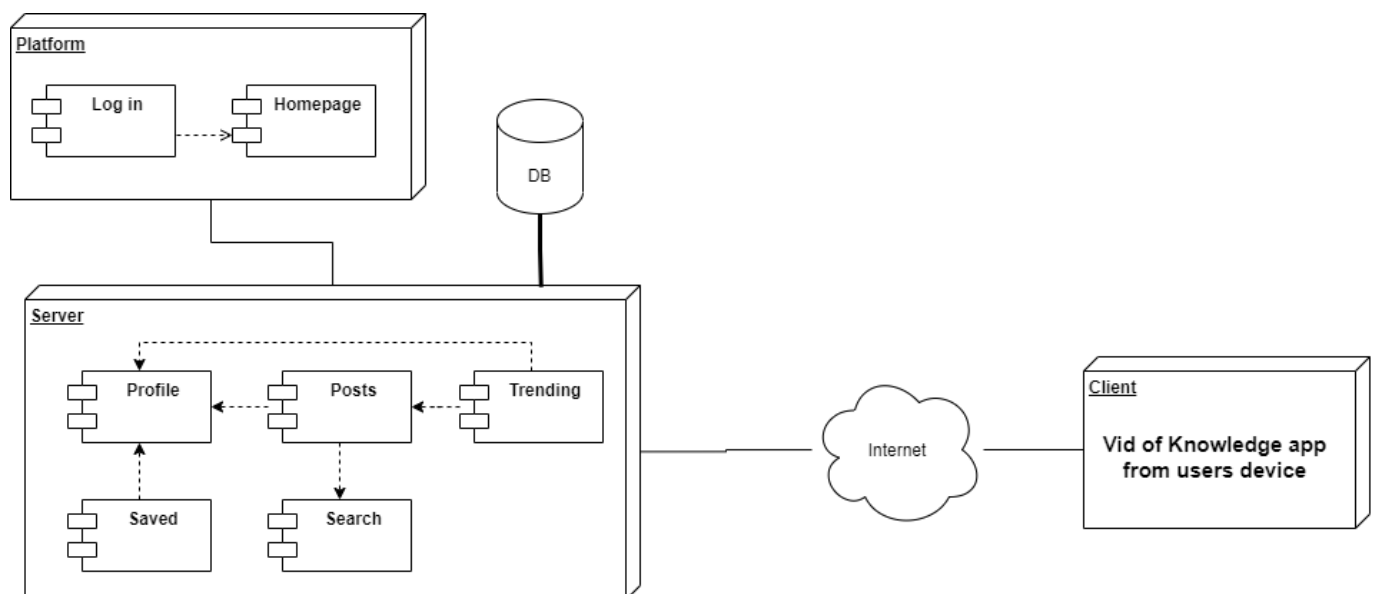
- **Class diagram:**



- **Components diagram:**



• **Distribution diagram:**



Conclusions

1. Bernal Arellano Roberto

Making UML diagrams is important to every project we want to work. They are very usefull becuae with them we can explain the way our product works to every potential user or everyone who's interested on use our product. The the use of this kind of diagramns we can show the way it works, the benefits, things you can and can't do, etc. This document shows how our software works and how it is helpfull in order to gain new knowledge.

2. Cisneros Acosta Jose Enrique

A very important step in the process of creating a project, are the diagrams, since they provide us with detailed information about which are the important elements within this project and how they will be implemented when creating the prototype of this project and itself. way they serve us as support for the management of the project.

3. Pimienta Castillo Kevin Aryam Christopher

With the development of the corresponding diagrams we saw that there were things that we were not considering. We remade more than once the diagrams until they had some logic. We struggle the most with the class diagram, as we hadn't made this type of diagram in a long time, and less correctly. There was a lot to consider as for the "normal" user and the "administrator" user as we did not consider the "administrator" user until now.

4. Sandoval Salazar Esmeralda

UML diagrams remain an important part of any software project, modeling serves not only large systems, even in small applications you get modeling benefits, one of the main advantages of using these types of diagrams is to help avoid problems with project development, automate processes, increase quality of work and reduce costs.



Rubric

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



[Github repository](#)