Introduction

🏆 A2.2 Learning Activity

System architecture documentation based on the 4 + 1 model

📘 Instructions

- Based on the documentation provided by the assessor, prepare the diagrams that can be used to design the architecture of the system based on the 4 + 1 model, for the case study.
- Any activity or challenge must be done using the **MarkDown style with .md extension** and the environment VSCode development process, it must be prepared as a **single page** document, that is, if the document with images, links or any external document must be accessed from tags and links, and must be named with the nomenclature **A2.2_ActivityName_StudentName.pdf**.
- It is a requirement that the .MD contains a label 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 information such as student data, work team, subject, career, advisor data, and even logo or images, it must have a section of contents or index, which really are **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 can be used to support you to organize your repository.

```
| readme.md
| | blog
| | | Cx.1_ActivityName.md
| | | Ax.1_ActivityName.md
| | diagrams
| | docs
| | html
| | img
| | pdf
```

✏️ Development

1. Draw the diagrams for each of the views established in the 4 + 1 architecture model.

- ☑️Scenario View: User Case Diagram
- ☑️ Logical view: Class Diagram

- ☑ Process view: Sequence Diagram
- ☑ Developer View: Component Diagram
- ☑ Physical view: Distribution Diagram

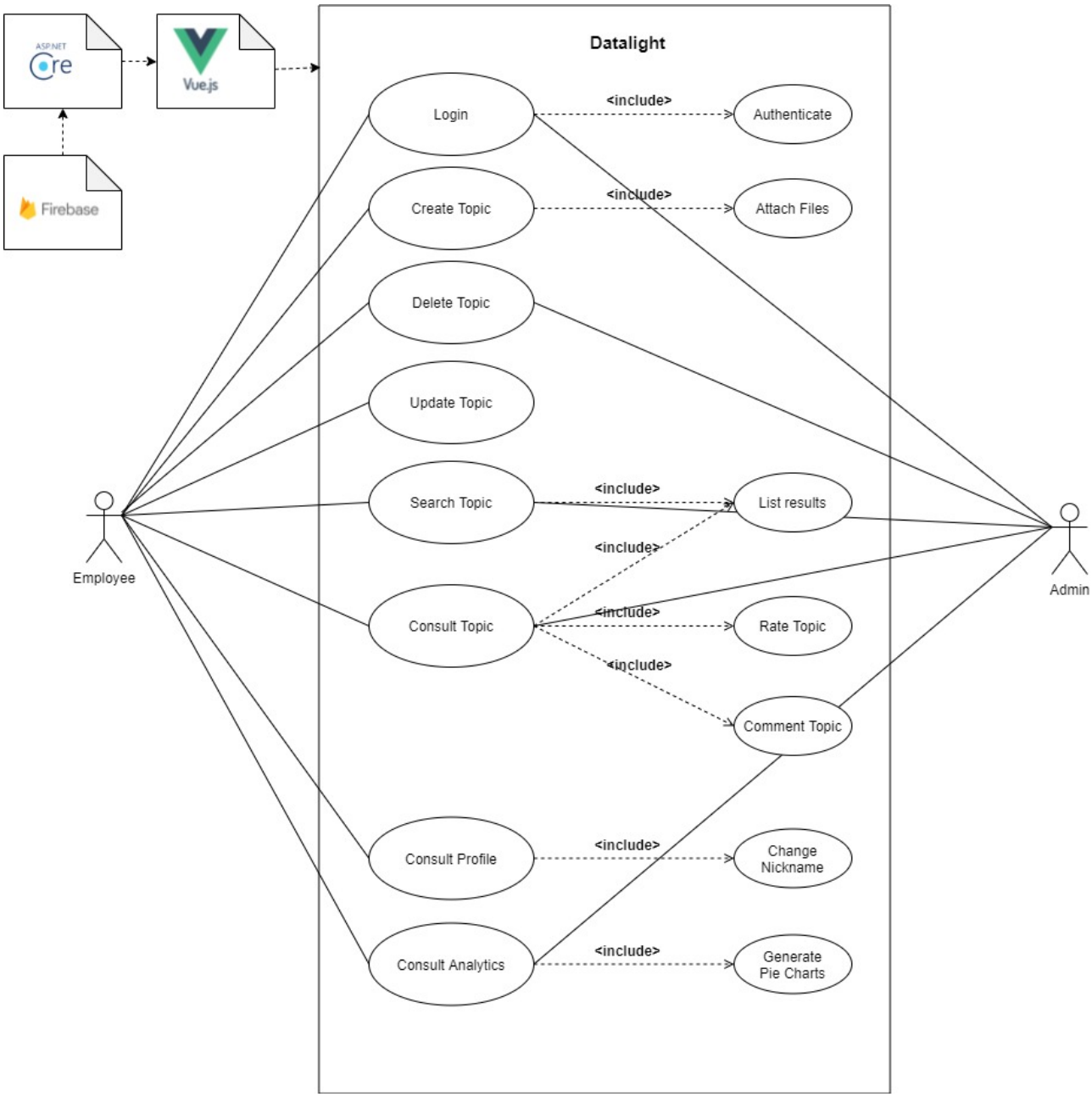
2. Each diagram must contain at least 3 elements within its representation.

- ☑ User Case Diagram (Include at least 5 elements from the diagram)
- ☑ Class Diagram (Include at least 5 elements from the diagram)
- ☑ Sequence Diagram (Include at least 5 elements from the diagram)
- ☑ Package diagram containing component diagrams (Include at least 3 elements from the diagram)
- ☑ Distribution Diagram (Include at least 3 elements from the diagram)

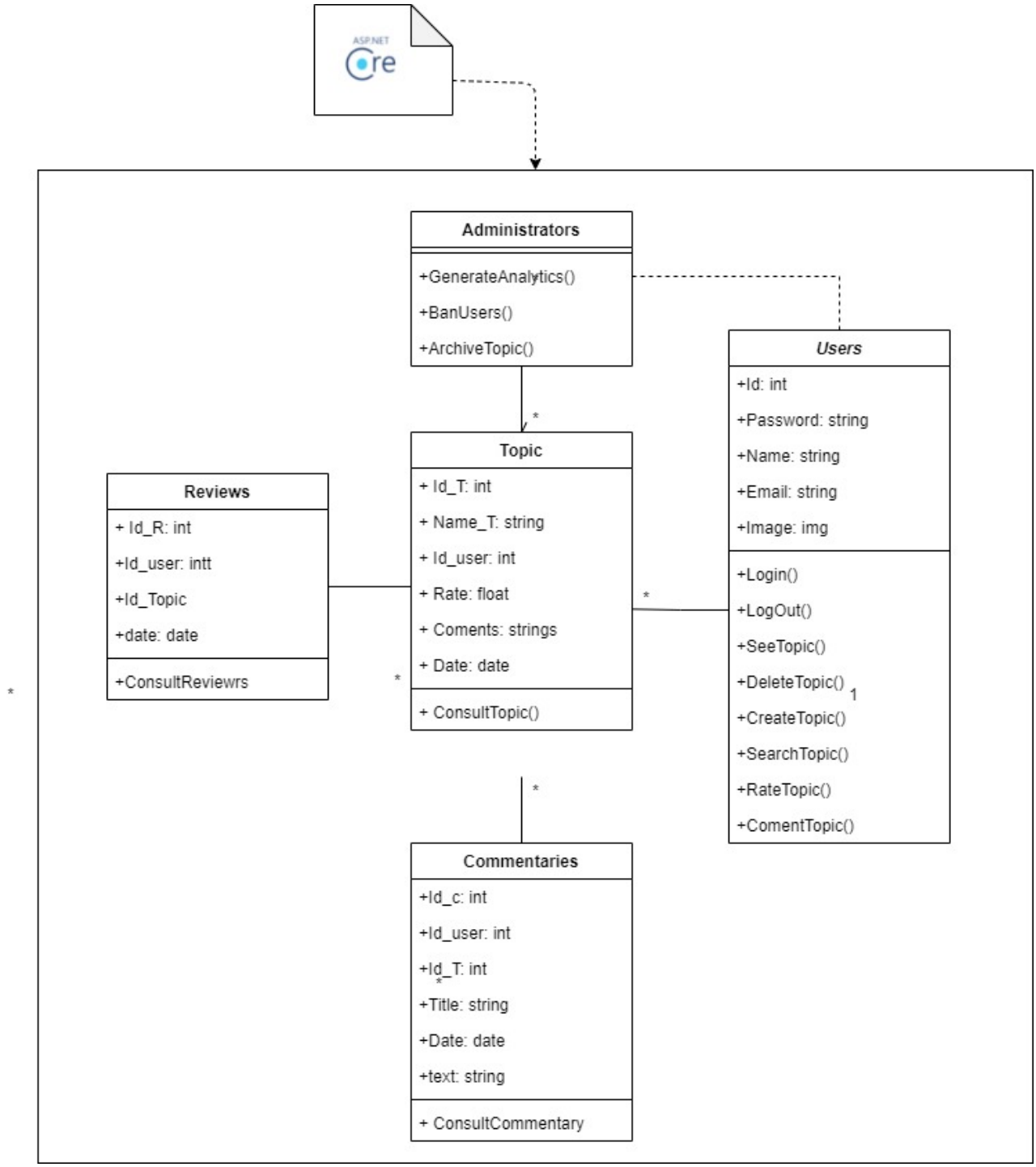
3. Indicate by means of annotations the own technologies that will be used, relying on images or illustrations to represent them.

4 + 1 Architecture Model

- Scenario View: User Case Diagram

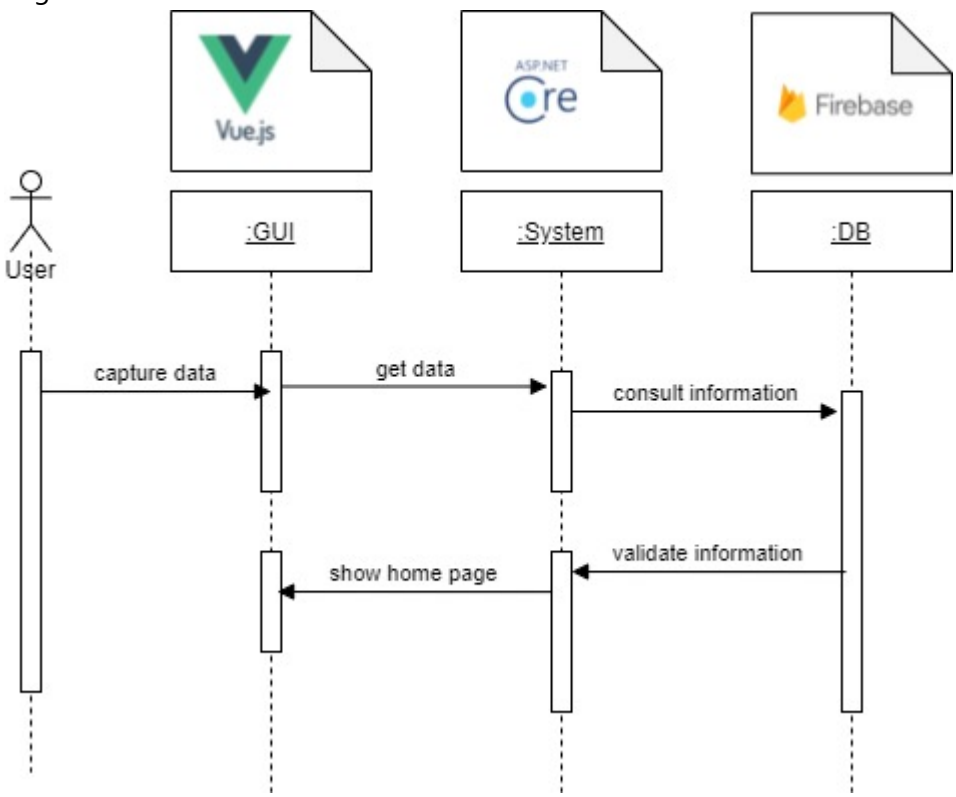


- ☑ Logical view: Class Diagram

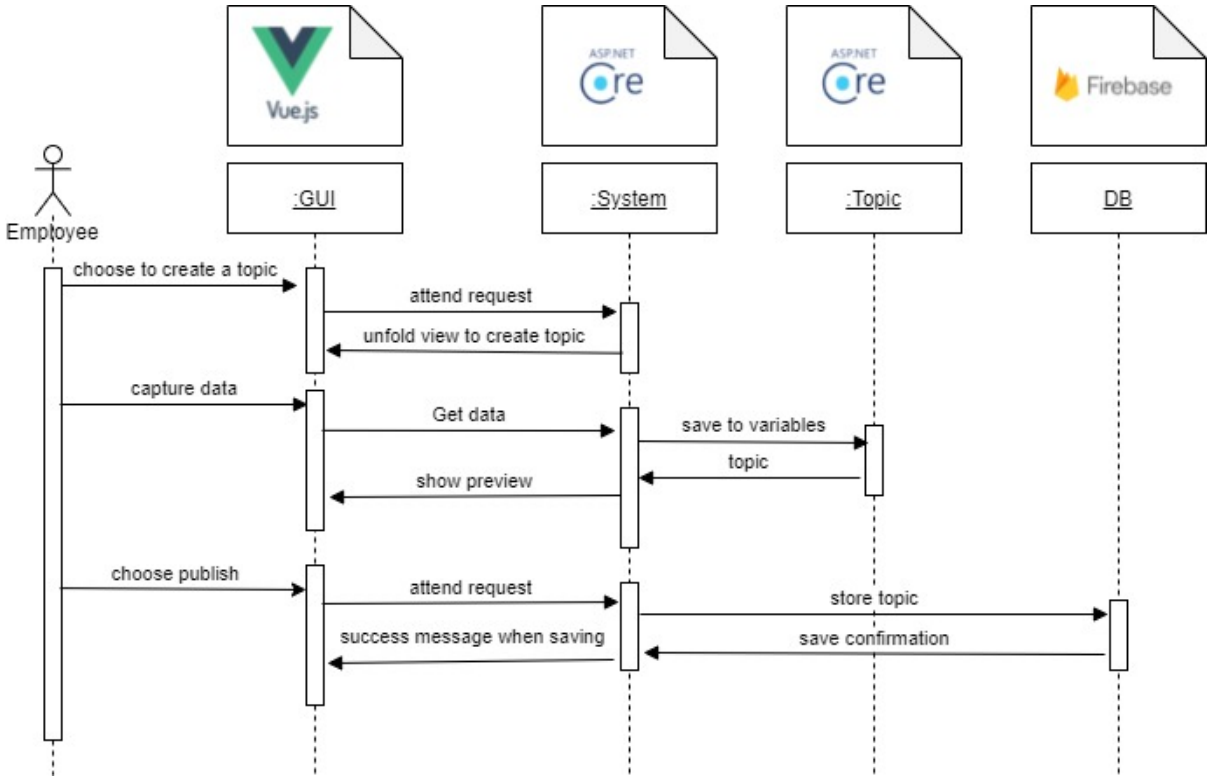


- ☑ Process view: Sequence Diagram

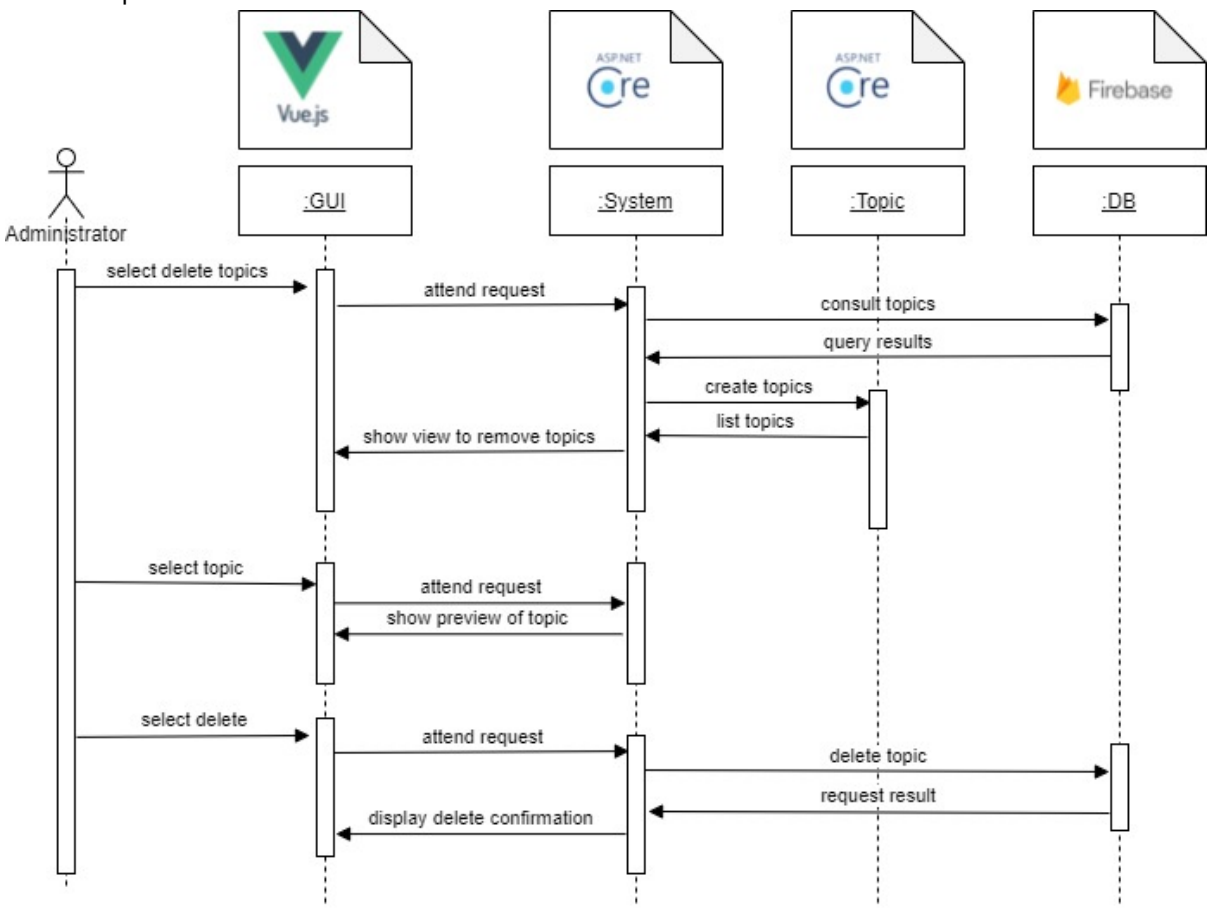
- Login



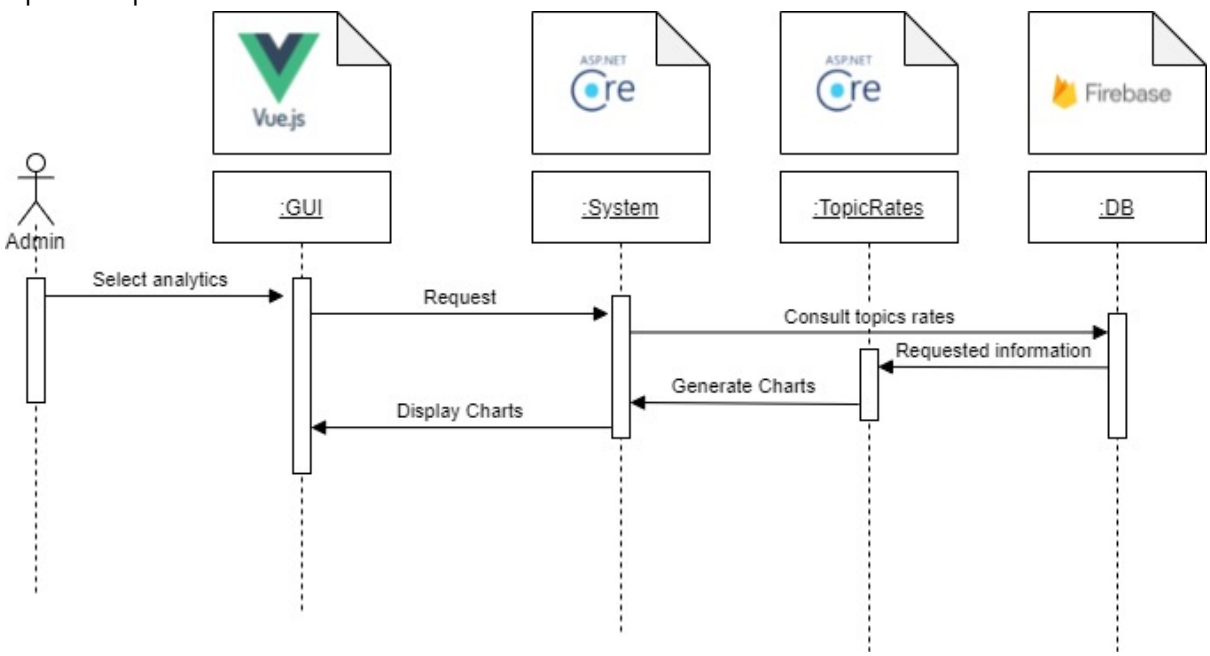
  - Create Topic



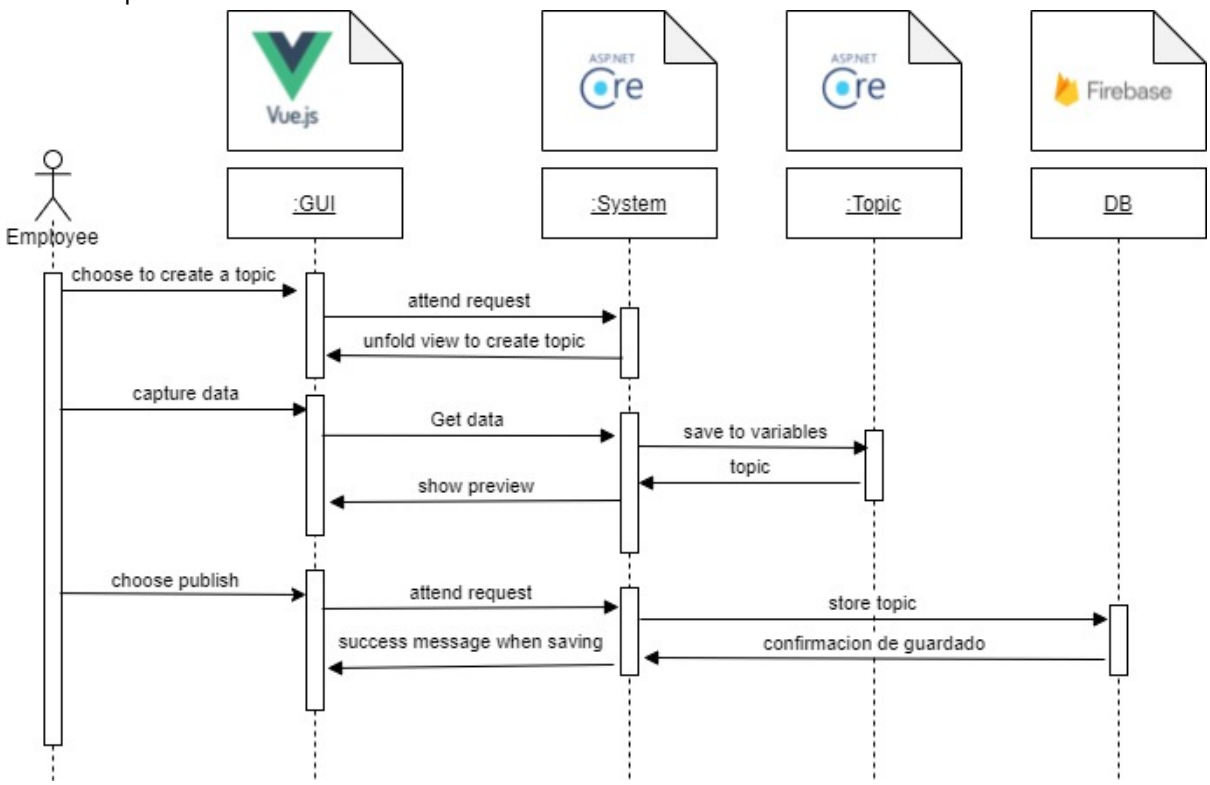
- Delete Topic



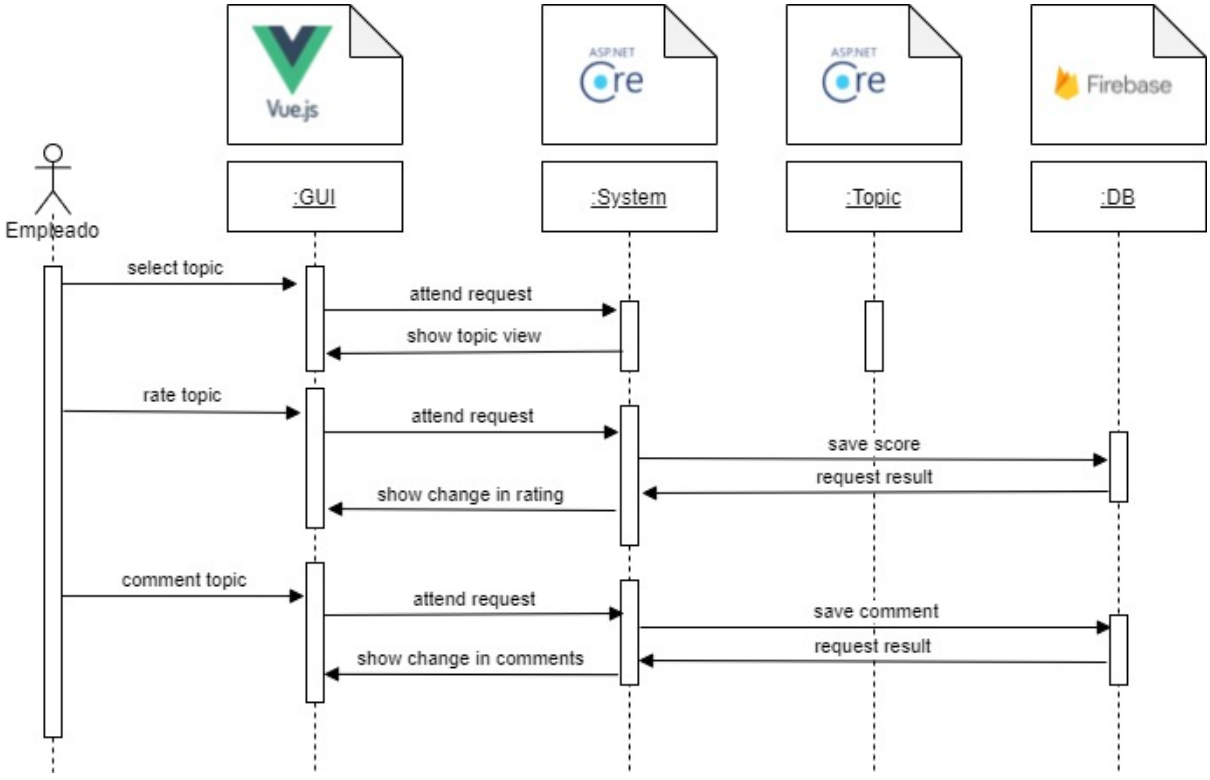
- Update Topic



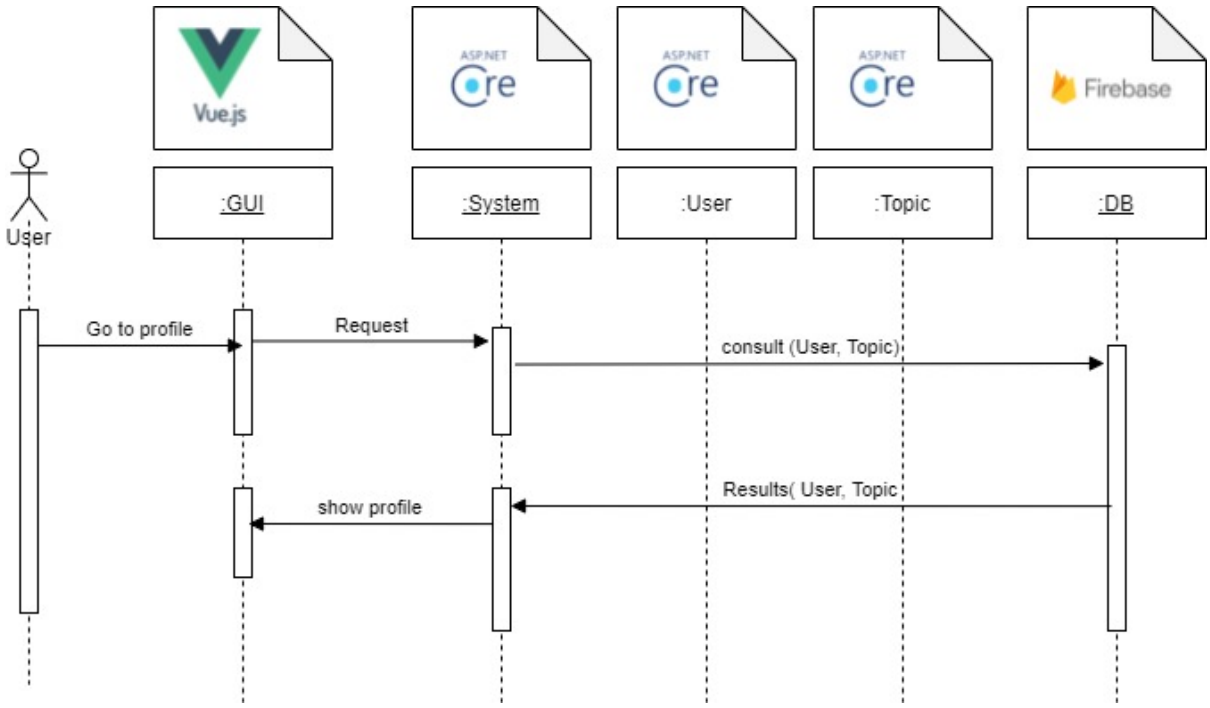
- Search Topic



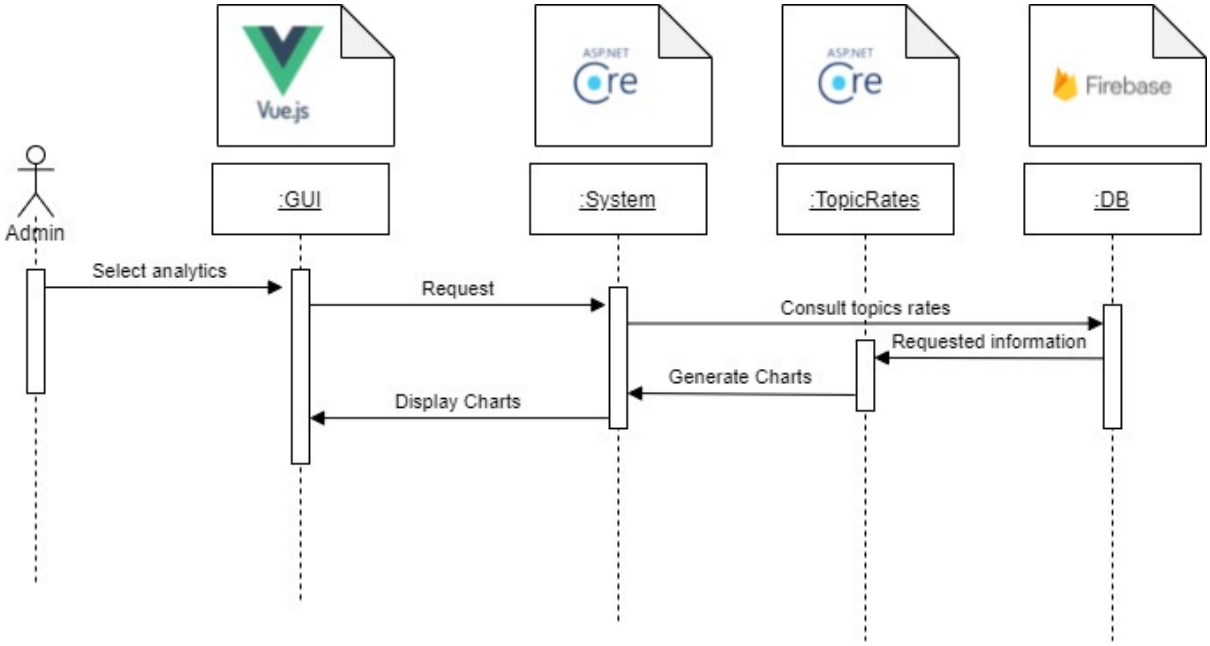
- Consult Topic



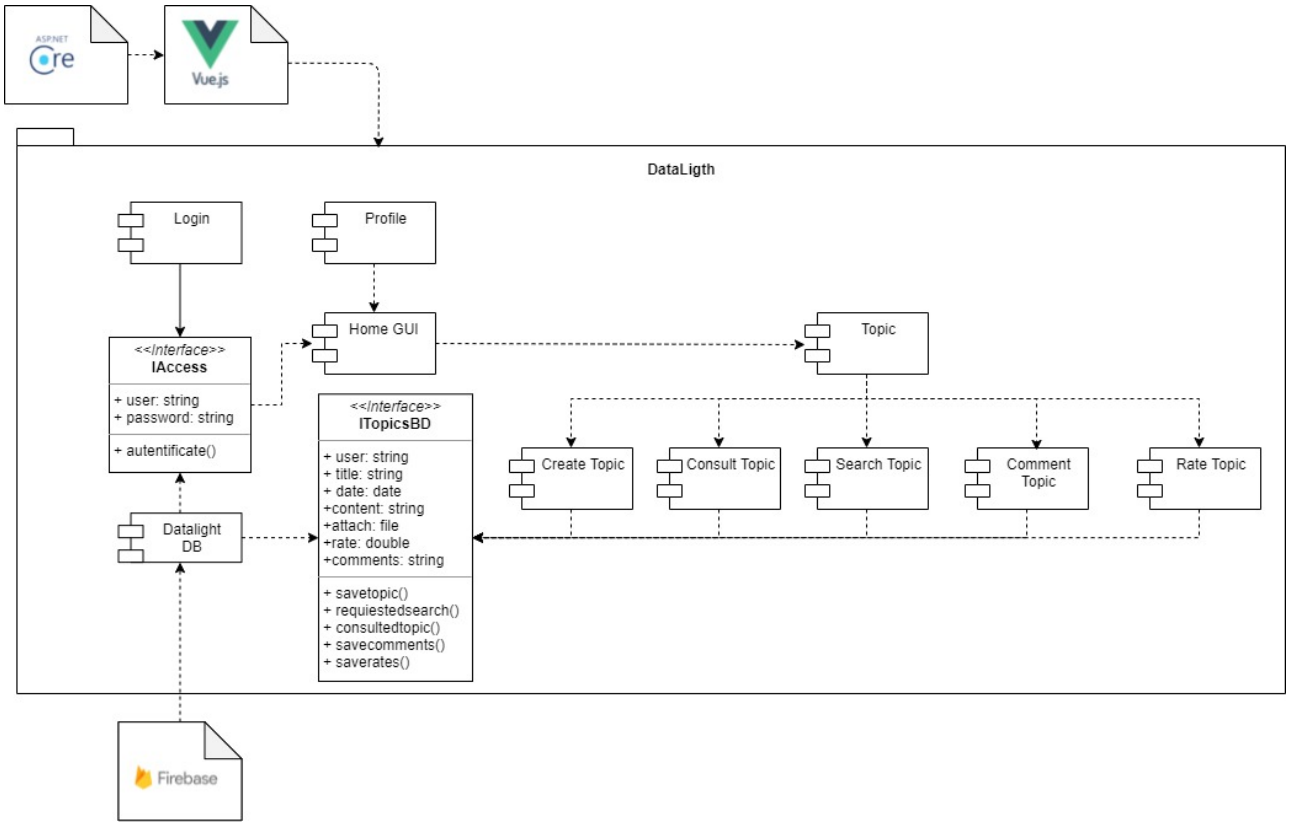
- Consult Profile



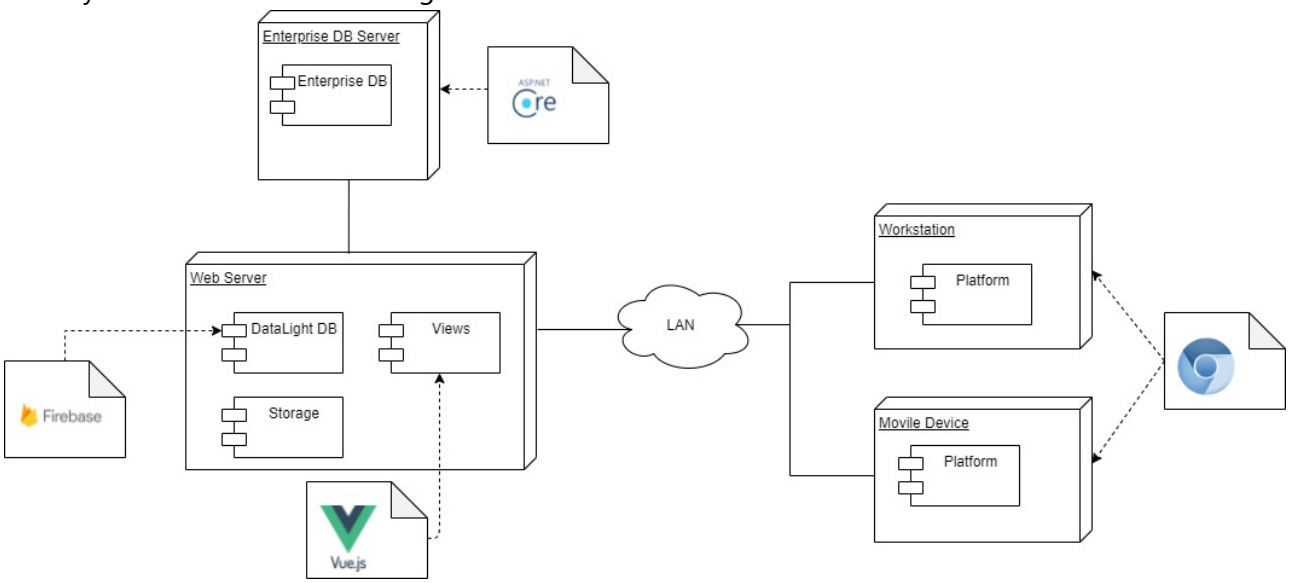
- Consult Analytics



- ☑ Developer View: Component Diagram



- ☑ Physical view: Distribution Diagram



Conclusions

Arredondo Bonilla Cesar

With this practice, it was possible to better understand how the 4 + 1 architecture model works, making use of the diagrams that we had previously prepared. The first points were simple to do since, as mentioned previously, we already had these diagrams which met the conditions of point 1 and 2, the complicated thing was to elaborate point 3 since we had to analyze what technologies will be used for the points shown in each diagram, within what we already had in mind was to use firebase to store the project database, in addition to the question of class programming we plan to use asp.net core, and finally we contemplate making use of vue.js for the views.

Chavez Vargas Javier

In the practice of 4 + 1 models, it helps us to better understand the models that had been made before in previous practices and to begin to define in a more exact way what we want and with what we are going to work on the project. In this way we can start thinking about carrying out more activities and where each of the activities will be concentrated with the chosen technologies

Mancilla Mora Moises

By developing this activity we were able to better understand what the 4 + 1 diagrams consist of. With this we were able to better complement our diagrams and see exactly all the tools or accessories that we are going to use in this project. The diagrams were analyzed and we observed in what specific part where we are going to use these complements.

Valerde Sanchez Alejandro

During this practice, the diagrams that had been made previously were reviewed, helping to better understand their application in the system. Until now, we have only done theoretical work, and this work helped to incorporate more directly how it will work and the development components that will be involved. Little by little the project gets closer to the final stage.

Rubric

Criteria	Description	Score
Instructions	Is each one 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	Is the student present 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

My Github