

Introduction



A2.2 Learning Activity

- Documentation of the system architecture based on the 4 + 1 model



Instructions

- Based on the documentation provided by the consultant, 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 carried out using the **Markdown style with .md** extension and the VSCode development environment, or you can use a platform for example **Notion**, and must be prepared as a **single page document**, that is, if the document has images, links or any external document, it must be accessed from tags and links, and it must be named with the nomenclature **A2.2_NombredelaAactivity_NombreAlumno.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 corresponding section, serving as evidence of its delivery, since being the **official** platform, it will be received here the rating 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 in 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 that supports you can be used to organize your repository.

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



Development

1. Draw the diagrams for each of the views established in the 4 + 1 architecture model.
 - ☒ View of the scenarios: Diagram of user cases

- ☒ Logical view: Class diagram
- ☒ Process view: Sequence diagram
- ☒ Developer view: Component diagram
- ☒ Physical view: Distribution diagram

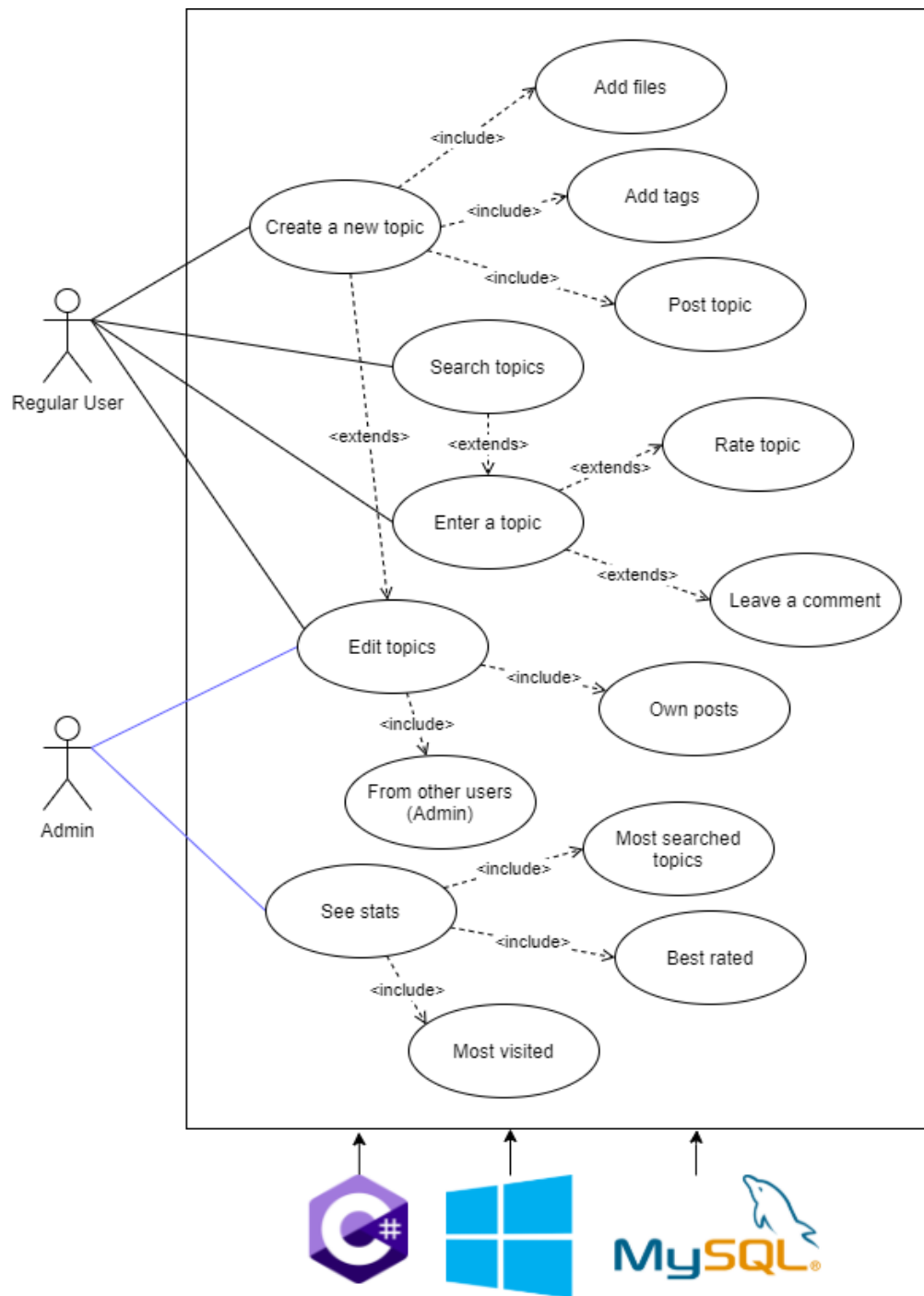
2. Each diagram must contain at least 3 elements within its representation.

- ☒ Use cases (Include at least 5 elements of the diagram)
- ☒ Sequence diagram (Include at least 5 elements of the diagram)
- ☒ Class diagrams (Include at least 5 elements of the diagram)
- ☒ Package diagram containing component diagrams (Include at least 3 - diagram elements)
- ☒ Distribution diagrams (Include at least 3 elements of the diagram)

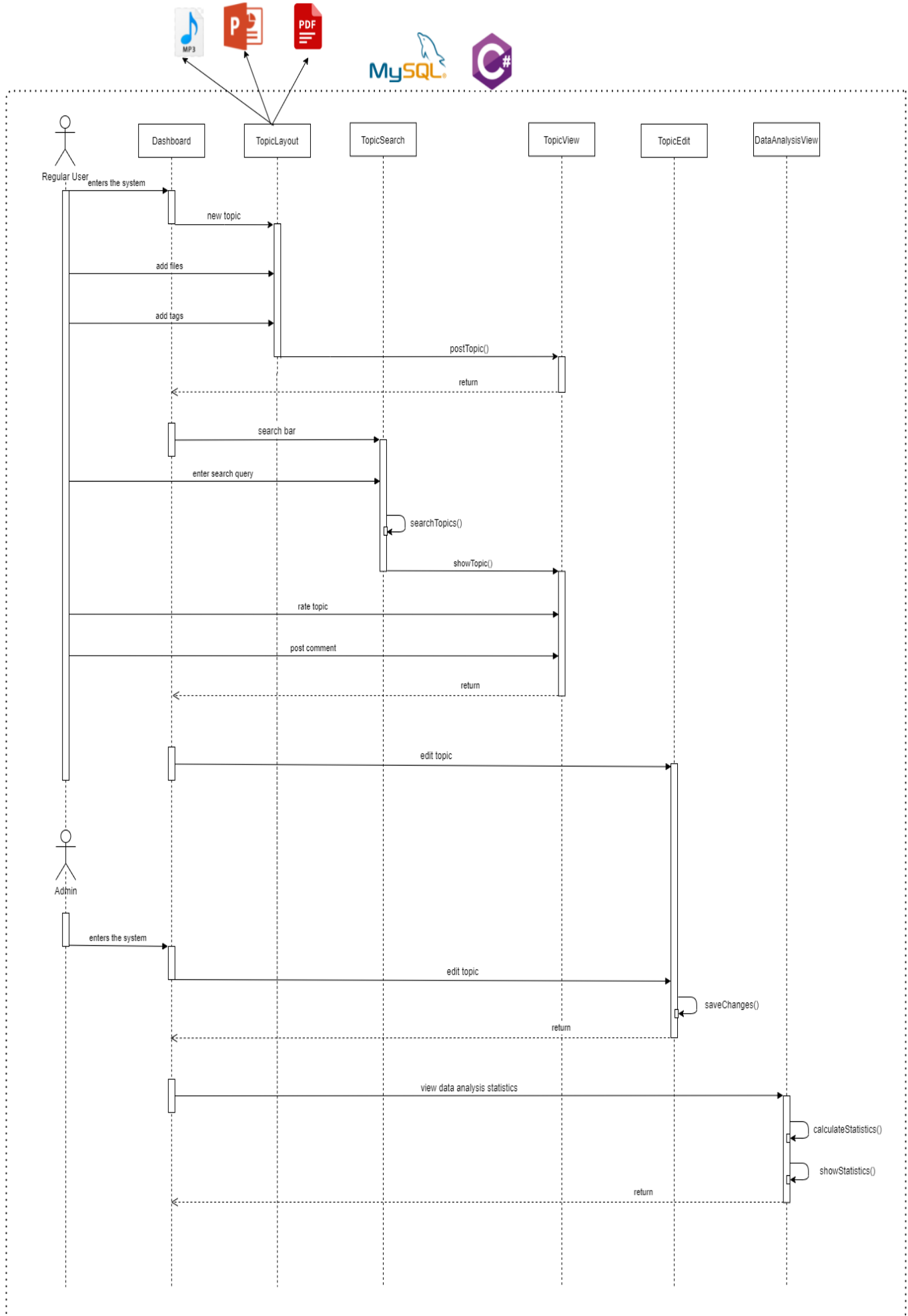
3. Indicate by means of annotations the own technologies that will be used, relying on images or illustrations that represent them.

Ligas a los diagramas drawio (para que los peguen lo que ya tienen hecho y poder hacerle los cambios que pide el profe). Ya despues vamos a pegar solo las imagenes esto es solo temporal para que todos tengan acceso a los diagramas.

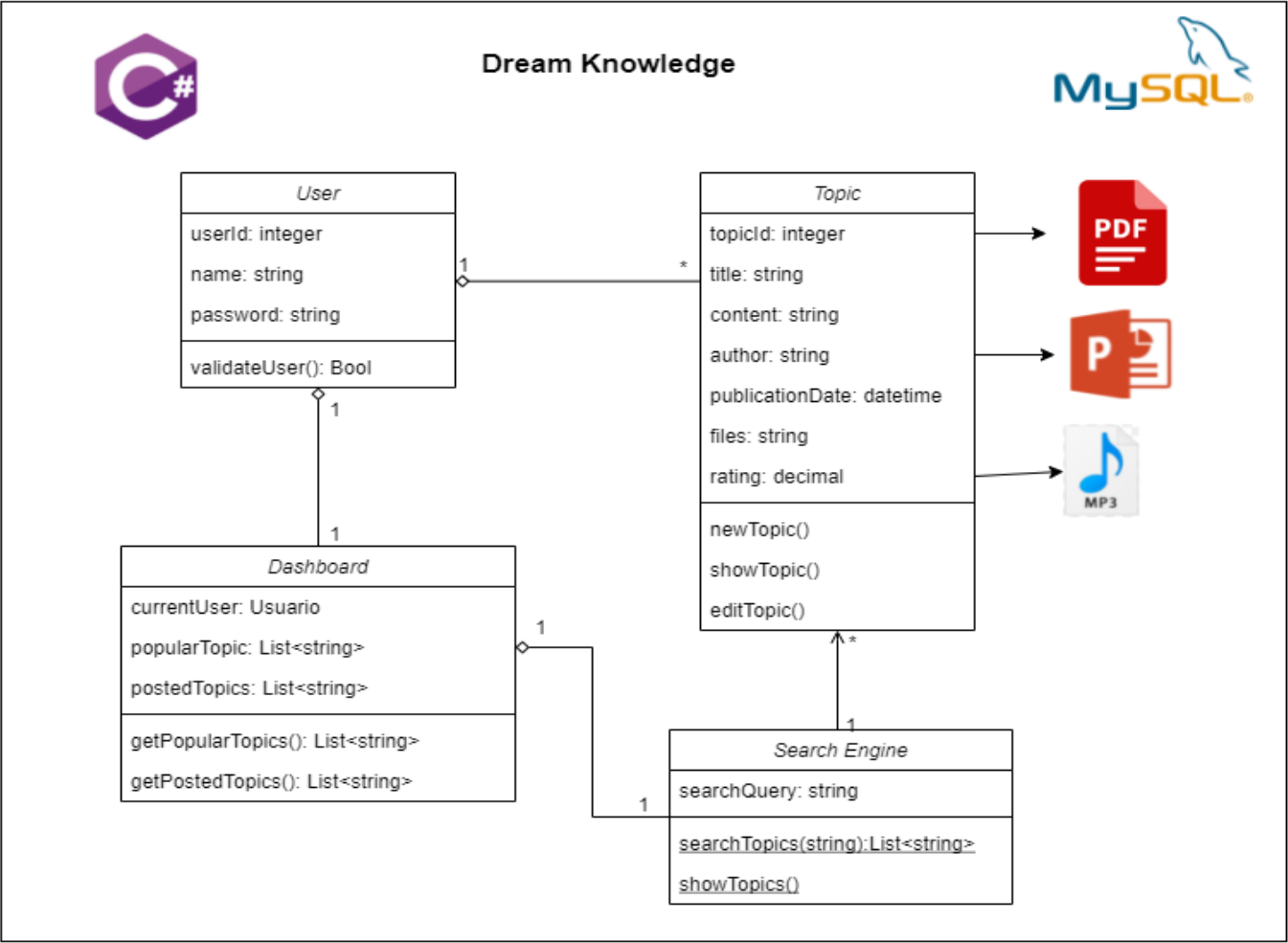
View of the scenarios



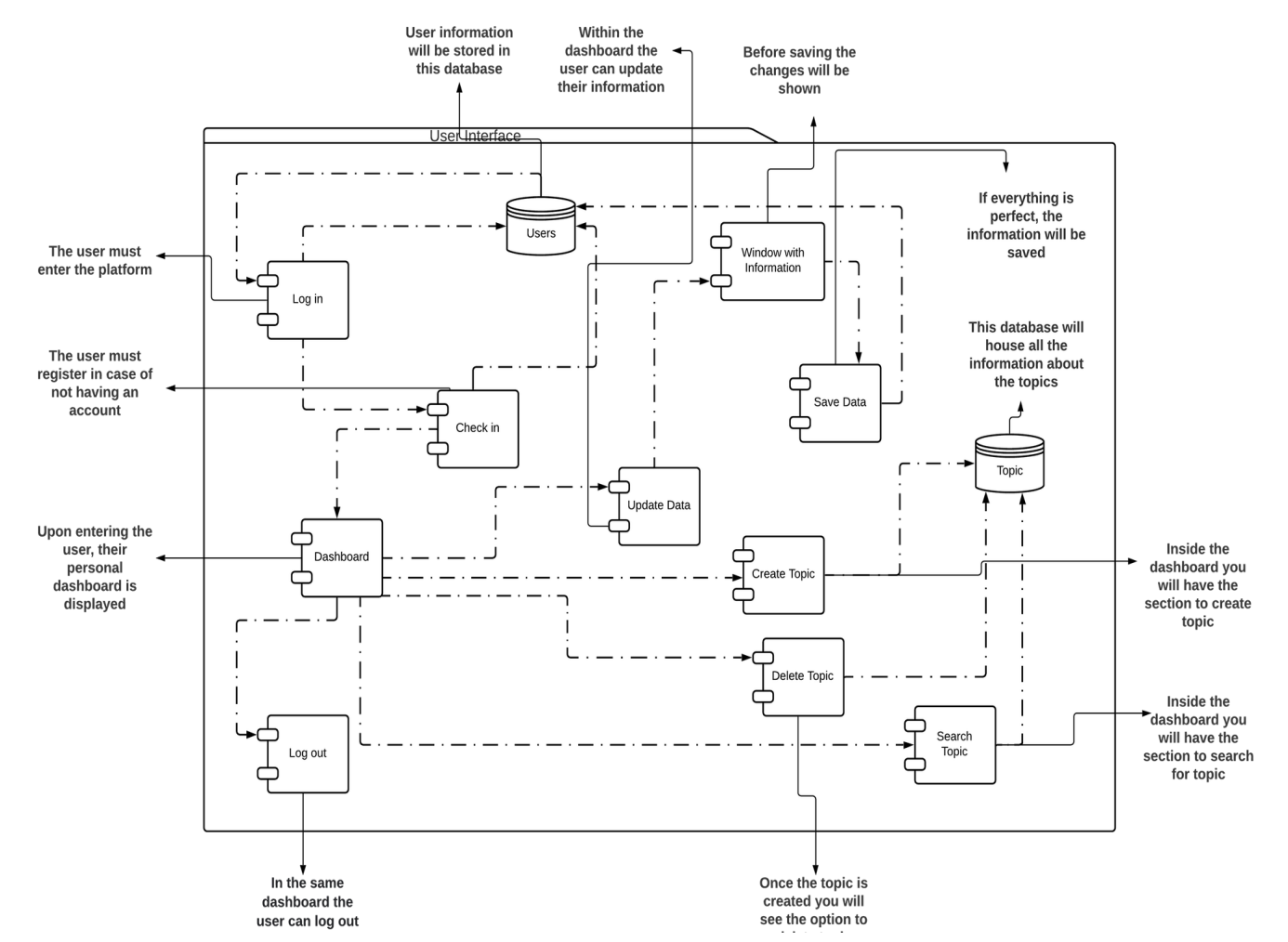
Logical view



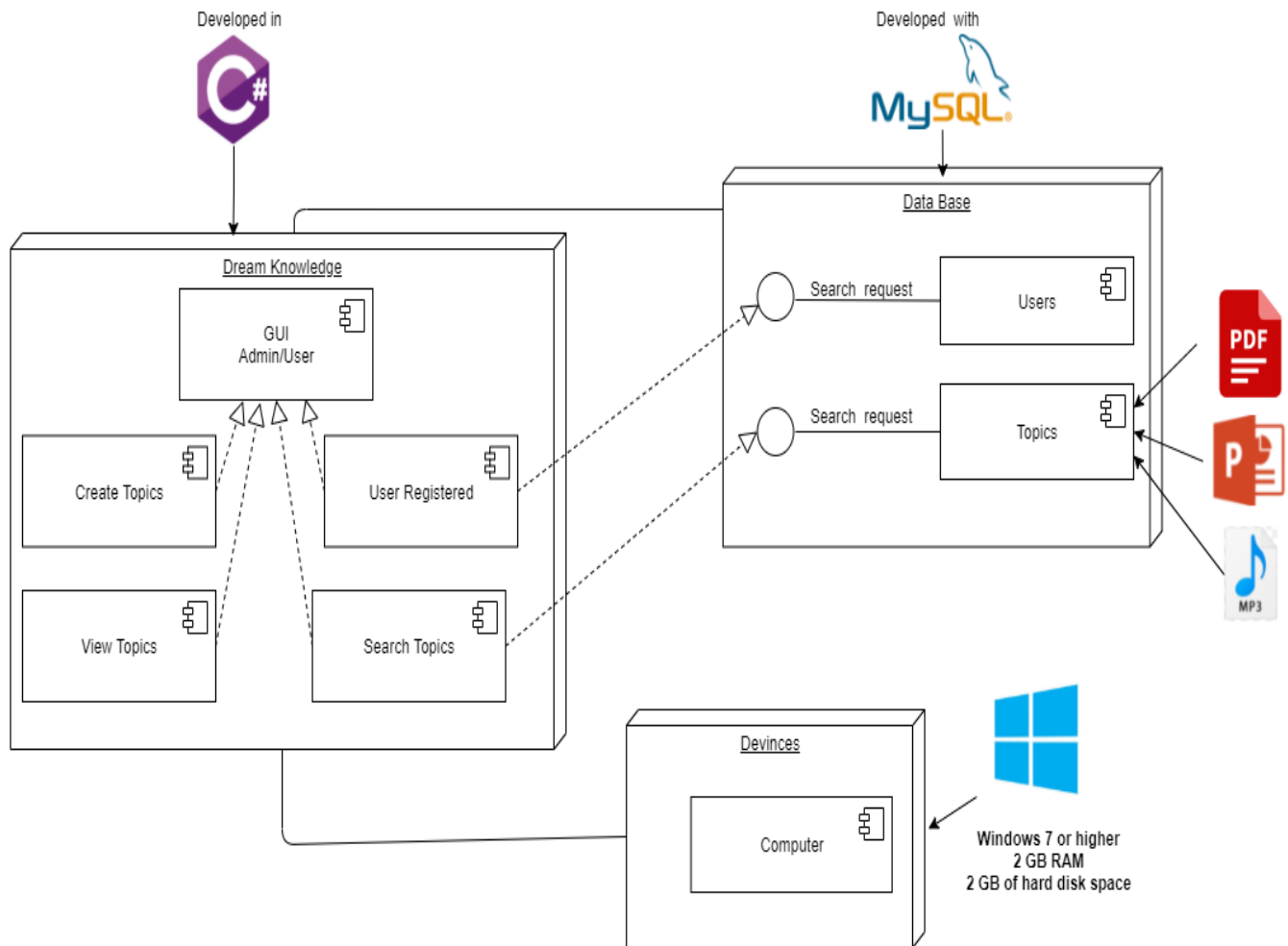
Process view



Developer view



Physical view



Reunion Evidence

The screenshot shows a Google Classroom interface during a presentation. The main content area displays a slide titled "Desarrollo" with the following text:

1. Elabore los diagramas para cada una de las vistas establecidas en el modelo de arquitectura 4+1.

- ❑ Vista de los escenarios: Diagrama de casos de usuario
- ❑ Vista logica: Diagrama de clases
- ❑ Vista de proceso: Diagrama de secuencia
- ❑ Vista del desarrollador: Diagrama de componentes
- ❑ Vista fisica: Diagrama de distribución

2. Cada diagrama deberá contener como mínimo 3 elementos dentro de su representación.

- ❑ Casos de uso (Incluir como mínimo 5 elementos del diagrama)
- ❑ Diagrama de secuencia (Incluir como mínimo 5 elementos del diagrama)
- ❑ Diagrama de clases (Incluir como mínimo 5 elementos del diagrama)
- ❑ Diagrama de paquete que contenga los diagramas de componentes (Incluir como mínimo 3 elementos del diagrama)
- ❑ Diagramas de distribución (Incluir como mínimo 3 elementos del diagrama)

3. Indicar mediante anotaciones las tecnologías propias que se habrán de utilizar, apoyándose de imágenes o ilustraciones que las representen.

Below the slide, there is a table for the rubric:

Criterios	Descripción	Puntaje

On the right side, a list of participants is shown:

- Tú
- RIGGEL ALIOTH DEHESA ZAZUETA
- HECTOR ARMANDO JARAMILLO REGINO
- CRISTIAN ANTONIO MORALES ARISMENDI

At the bottom, there are controls for the meeting, including a microphone icon and a "Levantar la mano" (Raise hand) button.

The screenshot shows a Zoom meeting interface. The main window displays a presentation of the 4+1 architectural model using UML diagrams. The diagrams include a System diagram with components like GUI, AdminUser, Create Topics, View Topics, User Registered, and Search Topics. A Data Base diagram shows Search request, Users, and Topics. A Devices diagram shows Computer. A UML Sequence diagram shows interactions between objects like J1, J2, J3, and J4, including messages like search request, async call, and async return. The presentation is titled 'HECTOR ARMANDO JARAMILLO REGINO está presentando'.

On the right side of the Zoom interface, there is a 'Detalles de la reunión' (Meeting Details) panel. It shows the meeting name 'HECTOR ARMANDO JARAMILLO REGINO', the time '19:08', and the location 'Windows 10'. There are also icons for participants, chat, and a toggle for 'Permitir a todo el mundo enviar mensajes' (Allow everyone to send messages).

The screenshot shows a Zoom meeting interface. The main window displays a presentation of the 4+1 architectural model using a document. The document is titled 'Development' and contains a list of tasks for each view established in the 4+1 architecture model. The tasks are:

- Draw the diagrams for each of the views established in the 4+1 architecture model.
 - View of the scenarios: Diagram of user cases
 - Logical view: Class diagram
 - Process view: Sequence diagram
 - Developer view: Component diagram
 - Physical view: Distribution diagram
- Each diagram must contain at least 3 elements within its representation.
 - Use cases (include at least 3 elements of the diagram)
 - Sequence diagrams (include at least 3 elements of the diagram)
 - Class diagrams (include at least 3 elements of the diagram)
 - Package diagrams containing component diagrams (include at least 3 - diagram elements)
 - Distribution diagrams (include at least 3 elements of the diagram)
- Indicate by means of annotations, the own technologies that will be used, relying on images or illustrations that represent them.

Below the tasks, there is a section titled 'Reunion Evidence' with a note: '(Ejemplo para estar después)'. The presentation is titled 'HECTOR ARMANDO JARAMILLO REGINO está presentando'.

On the right side of the Zoom interface, there is a 'Detalles de la reunión' (Meeting Details) panel. It shows the meeting name 'HECTOR ARMANDO JARAMILLO REGINO', the time '19:08', and the location 'Windows 10'. There are also icons for participants, chat, and a toggle for 'Permitir a todo el mundo enviar mensajes' (Allow everyone to send messages).

Conclusions

Cota Villa Edy Jesús Manuel

In this activity we try to use Krunchten's 4 + 1 model, which is a model based on views of different perspectives on a system, covering the areas that Krunchten called the logical, deployment, process, physical view, and finally the one that It would be the +1, which is the view of scenarios that tries to relate all the other views, this in the sense of giving a general description of the system based on 4 specific descriptions, well we apply this model based on some previously made diagrams but trying to integrate the technologies in which we are going to develop the system.

Jaramillo Regino Hector Armando

In this activity we use Kruchten's 4 + 1 model, which is based on perspective views in a system. During the activity we made an improvement of the UML diagrams created in the previous activity, in this activity we only added notes explaining functionalities and images about the technologies to be implemented throughout the development of the software, so we did not have many problems when it came to do it.

Dehesa Zazueta Riggel Alioth

Documenting software architecture is essential to understand how the processes and views of the system function. The architectural view used in this activity is 4+1; it implies four different views for logic, development, process, physical and a fifth one for scenarios. With this approach, it's easier to separate aspects of the system into groups and display an easy to understand architecture and flow of the system.

Morales Arismendi Cristhian Antonio

The 4 + 1 model is a good practice when we design the architecture of a software program, since it allows us to analyze the solution we are working on from different angles, which allows us to identify strengths and weaknesses, as well as Identifying problems or ambiguities in the conceptual design that could generate a problem in more advanced stages of the project, also allows us to see the program as it will be perceived by the various users.



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 Jesús Manuel



[Repository](#)

Jaramillo Regino Hector Armando



[Repository](#)

Dehesa Zazueta Riggel Alioth



[Repository](#)

Morales Arismendi Cristhian Antonio



[Repository](#)

