Software Design Course

Universidad Distrital Francisco José de Caldas

UNIVERSIDAD DISTRITAL
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Reporthal technical

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Description:

The project aims to develop a web-based task management application similar to Trello. The application will allow users to create boards for diIerent projects or work areas, add tasks to these boards, assign descriptions and due dates to tasks, move tasks between diIerent columns (e.g., "To Do", "In Progress", "Completed"), and collaborate with team members by assigning tasks and leaving comments. The project will focus on providing a user-friendly interface, real-time collaboration features, and scalability to accommodate various project sizes.
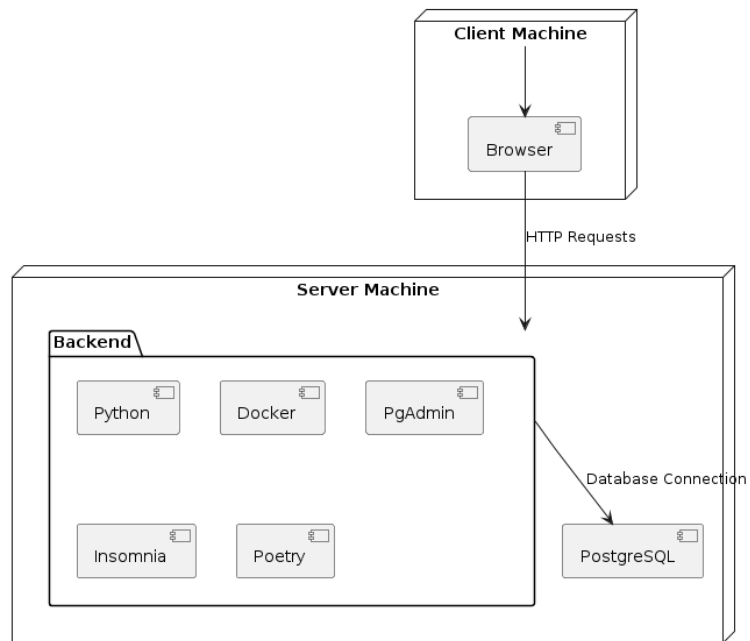
Stakeholders

- Team leader: They are responsible for organizing and overseeing project progress. They can create, view, update, and delete boards and cards to maintain organization and monitor team progress. They can also create and assign tasks to specific cards to manage activities and resources.
- Project member: They need to access the project management platform to collaborate on assigned tasks, update progress, and stay informed about project information. They can register for an account and then log in to view and manage project-related information they are working on.
- Administrator: They have special privileges to manage system configuration and user permissions. They can register accounts with administrative privileges and then log in to configure and manage the platform, including user management and system settings.
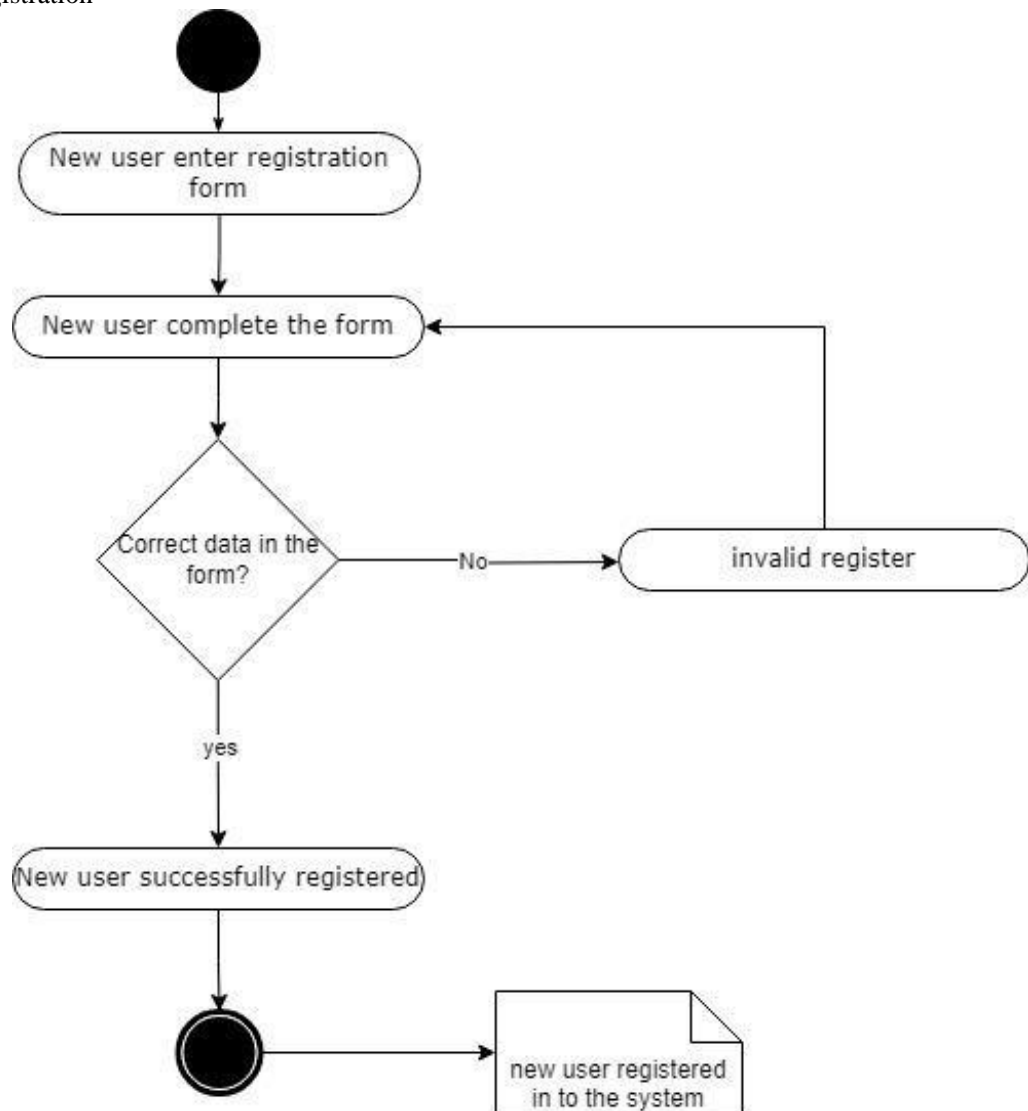
USER HISTORIES

- As a team leader, I want to create new boards to organize tasks and projects.
- As a team leader, I want to view details of a specific board to monitor progress.
- As a team leader, I want to view a list of all boards to get an overview of projects.
- As a team leader, I want to update the details of an existing board as needed.
- As a team leader, I want to delete unnecessary boards to maintain organization.
- As a team leader, I want to create new cards on boards to manage activities.
- As a team leader, I want to view details of a specific card to monitor task progress.
- As a team leader, I want to view a list of cards associated with a board for an overview.
- As a team leader, I want to update the details of an existing card as needed.
- As a team leader, I want to delete cards that are no longer necessary to keep the board focused.
- As a team leader, I want to create new tasks and assign them to specific cards to manage activities.
- As a team leader, I want to update the details of existing tasks to track progress.
- As a team leader, I want to delete tasks that are no longer relevant to keep the board organized.
- As a team leader, I want to move tasks between different cards to prioritize resources.
- As a project member, I want to register an account to access the project management platform.
- As a project member, I want to log in to my account to view and manage project-related information.
- As an administrator, I want to register an account with administrative privileges to manage the system.
- As an administrator, I want to log in to my administrative account to manage system configurations and permissions
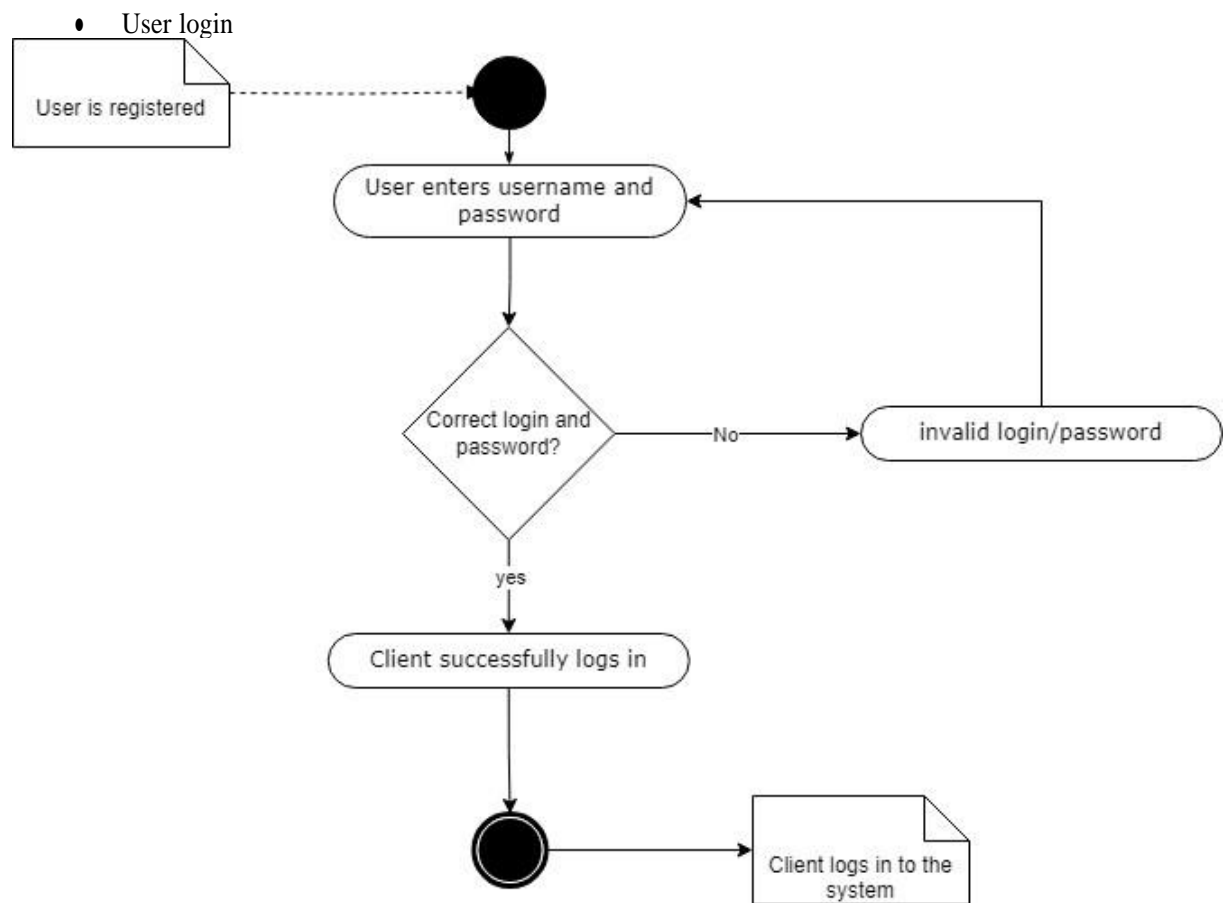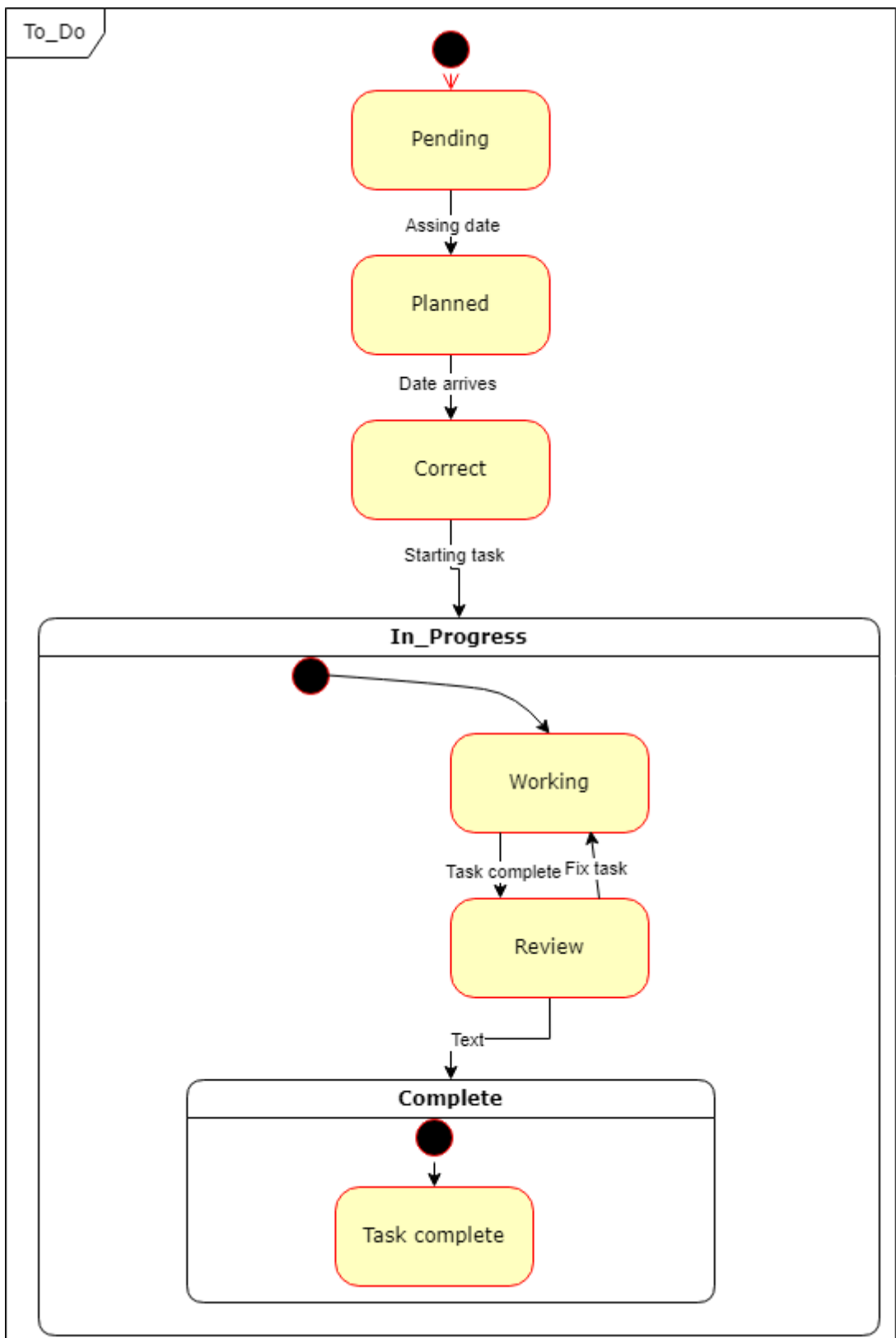
Diagrams

Deployment diagram

New user registration
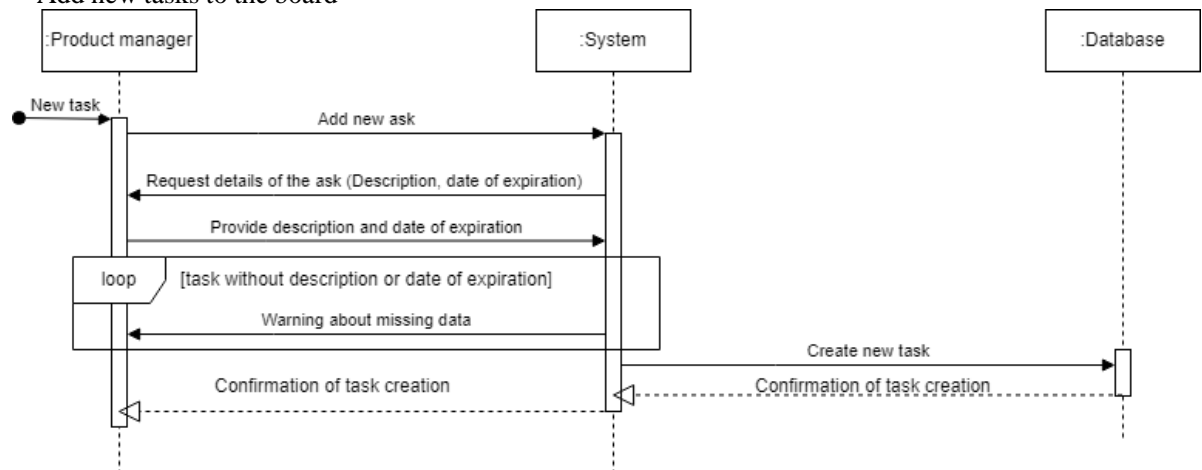
- User login

User is registered

User enters username and password

Correct login and password? —No→ invalid login/password

yes

Client successfully logs in

Client logs in to the system

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- Tasks between diIerent columns on my dashboard

To_Do

Pending

Assing date

Planned

Date arrives

Correct

Starting task

In_Progress

Working

Task complete | Fix task

Review

Text

Complete

Task complete

- Add new tasks to the board

:Product manager | **:System** | **:Database**

New task

Add new ask

Request details of the ask (Description, date of expiration)

Provide description and date of expiration

loop [task without description or date of expiration]

Warning about missing data

Create new task

Confirmation of task creation

Confirmation of task creation

- Assign tasks to other users

:Product manager | **:User** | **:System** | **:Database**

assign task

Assign task to user

receive assigned task

Task complete

Update state of the task

Complete task notification
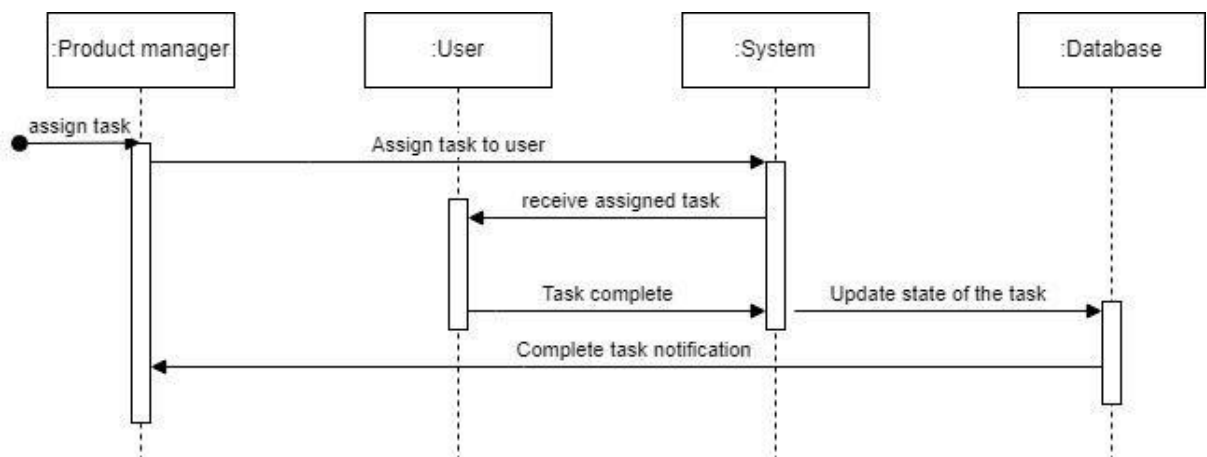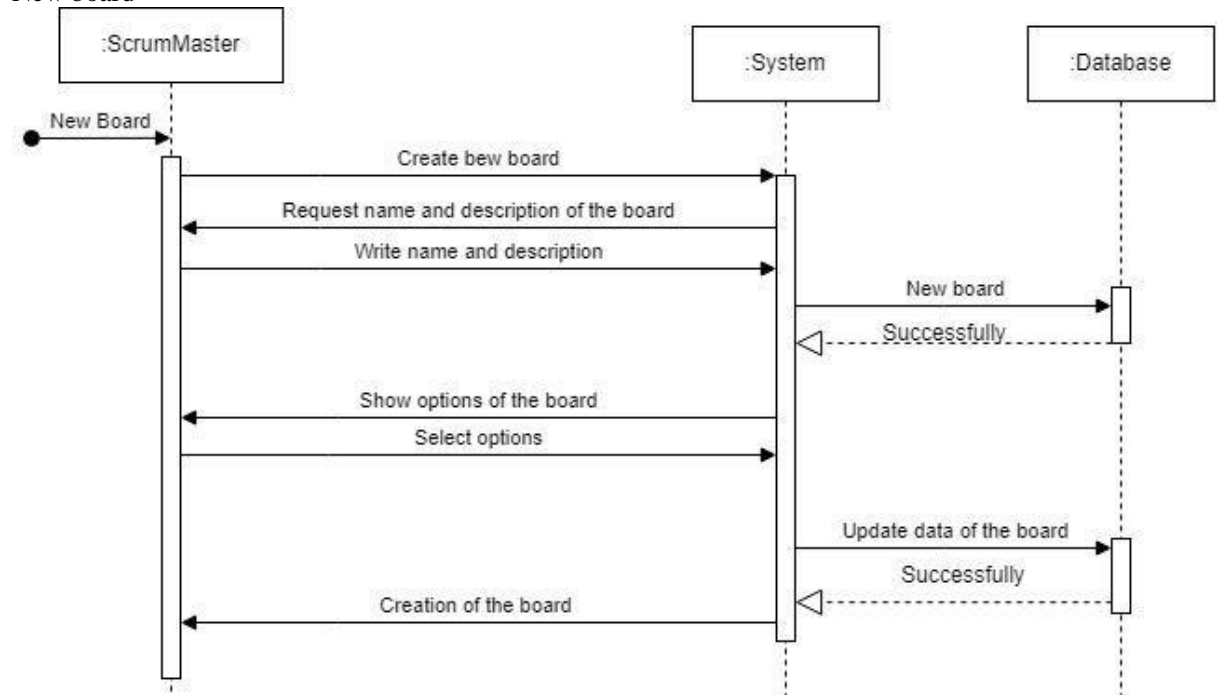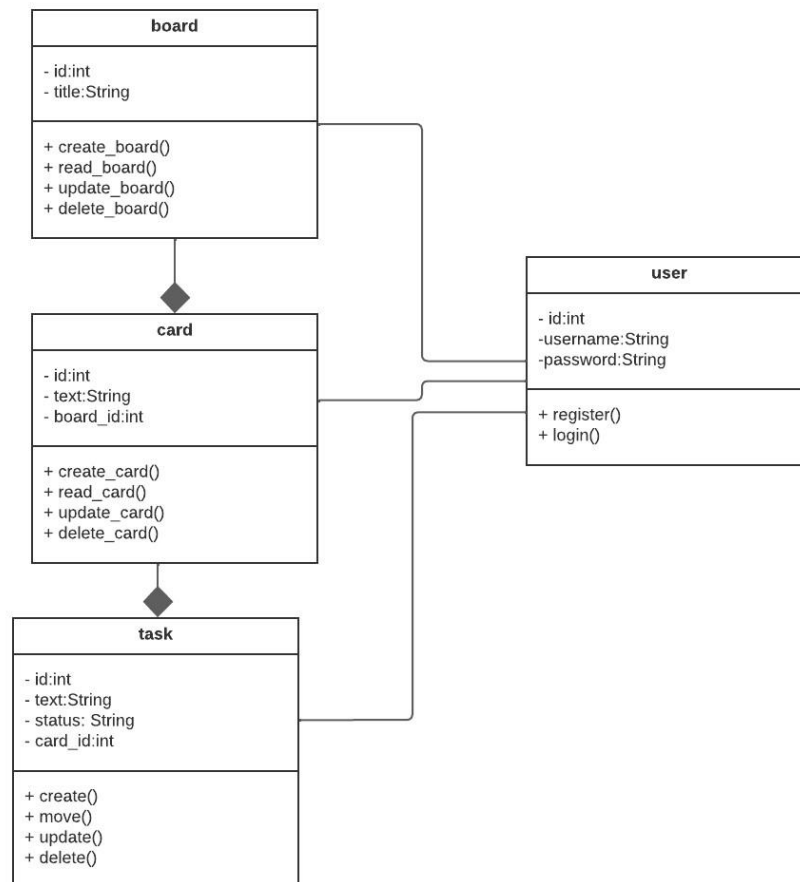
- Administrator management
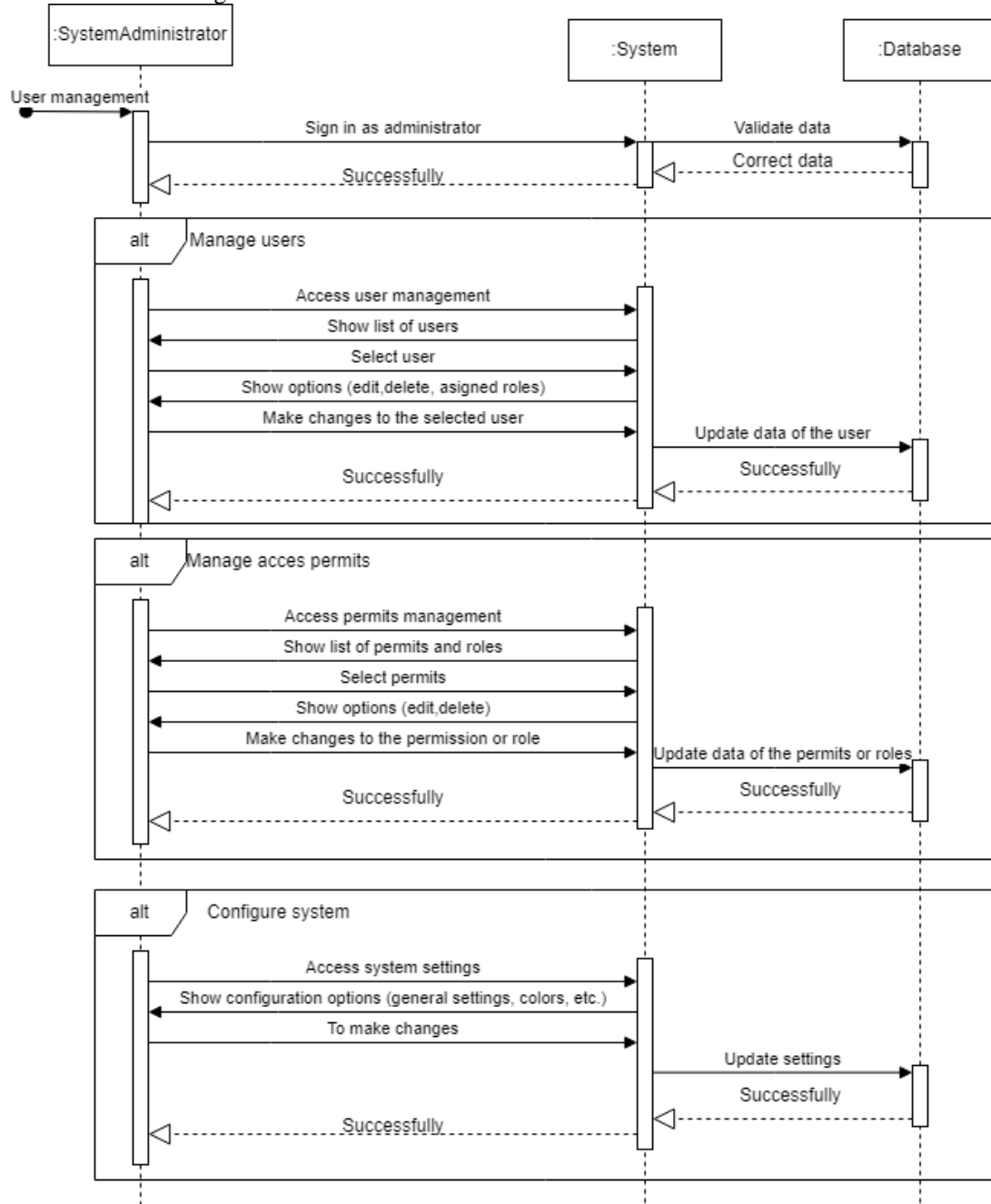
New board

DIAGRAMA DE CLASES

By default, the application will retain certain information in its database to facilitate testing whether it processes all CRUDs in the tables.

User Information:
- Username
- Encrypted passwords

Task Information:
- Task text
- Status

Board Information:
- Title

Card Information:
- Text

RESULTADOS

Documentación de Requisitos:

Especificación detallada de los requisitos funcionales y no funcionales de la aplicación, incluyendo casos de uso, diagramas de flujo y requisitos de seguridad.

Diseño de la Aplicación:
Diseño de base de datos, incluyendo la estructura de tablas, relaciones y esquema de datos y la función de back.

Desarrollo de la Aplicación:
Código fuente de la aplicación para el backend, implementando las funcionalidades principales y las características específicas del proyecto.
Implementación de la lógica de negocio, gestión de usuarios, gestión de tableros y tareas, colaboración en tiempo real, entre otras funcionalidades.

Documentación del Proyecto:
Documentación técnica del proyecto, incluyendo arquitectura del sistema, tecnologías utilizadas, instrucciones de instalación y configuración, y guías de uso.
Documentación de usuario, proporcionando instrucciones paso a paso sobre cómo utilizar la aplicación y sus características.

Despliegue y Puesta en Marcha:
Entorno de producción configurado y lista la aplicación para su despliegue.
Proceso de despliegue documentado, incluyendo configuración de servidores, gestión de dependencias y configuración de seguridad.

CONCLUSIONES

- Cumplir con los requisitos funcionales y de rendimiento establecidos al inicio del proyecto, asegurando así la satisfacción de las necesidades del usuario.
- Desarrollar la Lógica del Backend y se ha implementado la lógica necesaria para gestionar usuarios, tableros, tareas y colaboración entre los miembros del equipo.
- Fomentar la Colaboración en tiempo real ha facilitado la comunicación y la coordinación entre los miembros del equipo, mejorando la eficiencia del trabajo conjunto.
- Desplegar con Éxito en un entorno de producción, asegurando un lanzamiento sin contratiempos y una transición fluida para los usuarios finales.