FABRA CONTROLE

Project Requirements

Fabra Controle

Prepared By

KHOULOUD TAOUCHIKHT

Supervised By

MR. AHMED BOUTAMEN

MR. YOUSSEF FARISSI

Description:

The application is designed to ensure the authenticity and integrity of contracts used in civil projects. It provides a platform with two types of user accounts: Manager and Consultant. The Manager account allows users to create folders, upload contract files , and manage their lifecycle. Each file has attributes such as the selected client (related to the civil project), contract value, file type, keywords, and restriction level. The Manager can cancel, modify, or archive files. Additionally, the Manager can sign files, which triggers a process to convert them into signed files. Upon signing, the file becomes unmodifiable, but the Manager can cancel the signature, rendering the file null and unusable. The Consultant account allows users to view the signed documents.

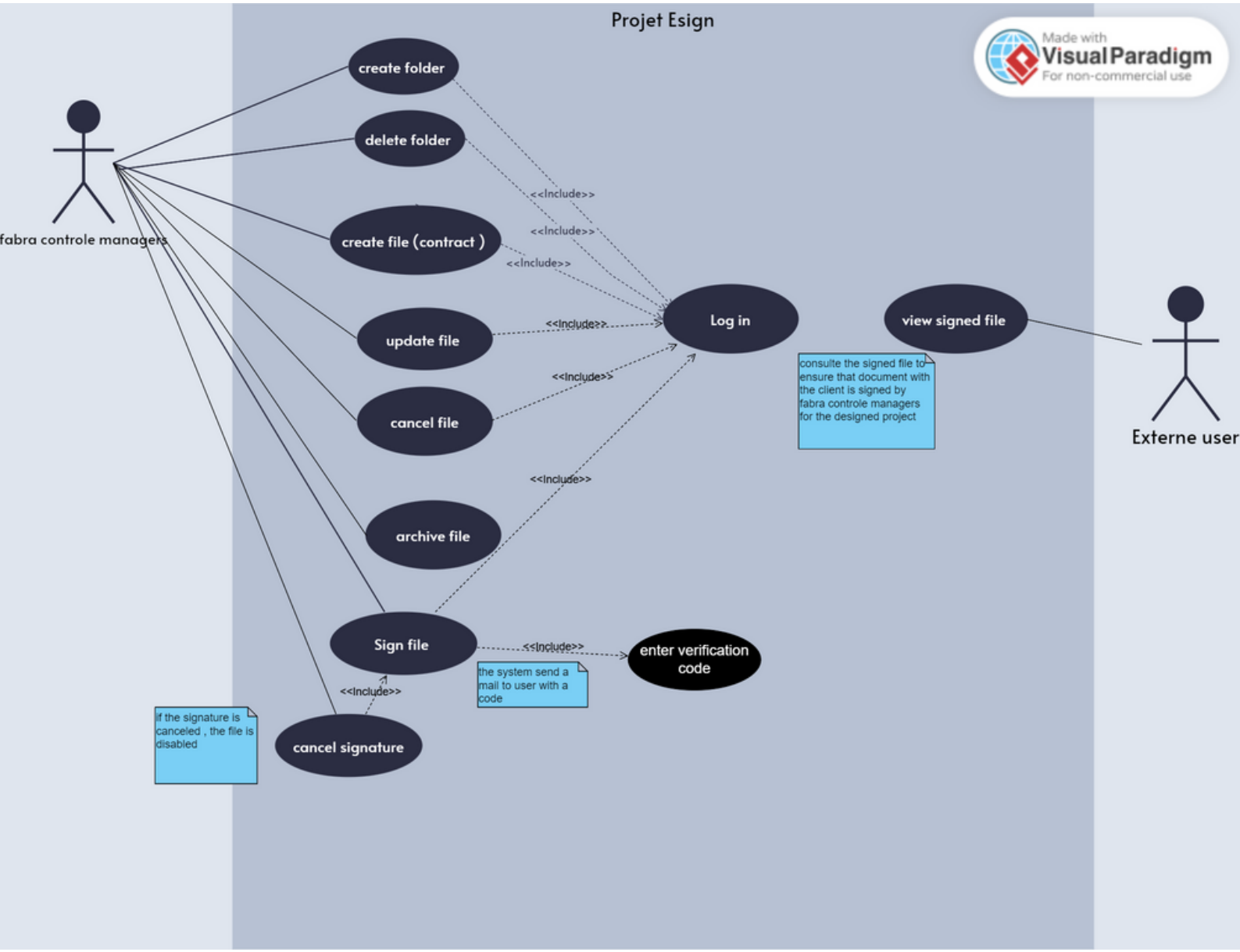
Functional Needs:

1. **User Authentication**: The application should provide secure user authentication for both Managers and Consultants.
2. **Folder and File Management**: Managers should be able to create folders and upload contract files to the application.
3. **Files Attributes**: Each file should have attributes such as selected client, contract value, file type, keywords, and restriction level.
4. **File Lifecycle:** Managers should be able to cancel, modify, or archive files.
5. **File Signing:** Managers should be able to sign files by giving a code that is sent to the manager's emails to secure the file signing process.
6. **Signature Cancellation**: Managers should have the ability to cancel the signature of a file.
7. **Consultant Access**: Consultants should be able to view the signed documents

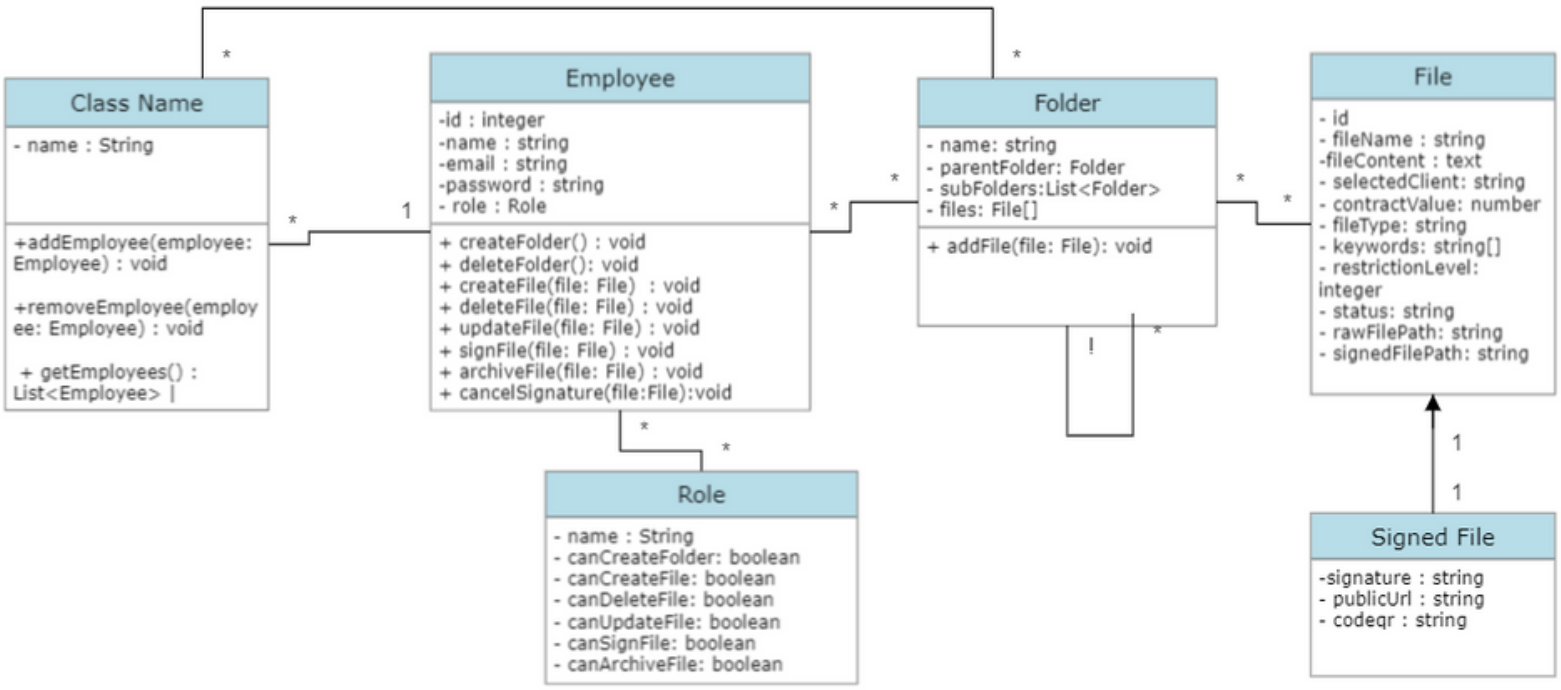
Non-Functional Needs:

1. **Security:** The application should ensure the security and integrity of user accounts, files, and data.
2. **User-Friendly Interface:** The application should have an intuitive and user-friendly interface for ease of use.
3. **Performance:** The application should perform efficiently, allowing quick access to folders and files, even with a large number of files.
4. **Scalability:** The application should be designed to handle a growing number of users, folders, and files.
5. **Reliability:** The application should be reliable, ensuring that files and their signatures are stored securely and accurately.

Use case Diagram



Class Diagram



Fabra Controle Company has a one-to-many relationship with Employee. The addEmployee() and removeEmployee() methods allow us to add and remove employees from the company's list of employees, while the getEmployees() method returns a list of all the employees in the company.

Each Employee has a role attribute. The role attribute is an instance of the Role class and determines what actions the employee is permitted to perform on files. The Employee class has methods for creating, deleting, updating, signing, and archiving files. These methods utilize the permissions assigned to the employee's role to determine whether or not the requested action is permitted.

the Company has multiple folder. An Employee can manage multiple Folders and Files associated with them.

Each File has status attribute that describe the status of the file (canceled,signed ..). Additionally, each File has both a raw file path and a signed file path .

the signed file is a subclass of file , it has the signature attribute and a public url and a code QR to allow an external user to view the file.