1 Introduction

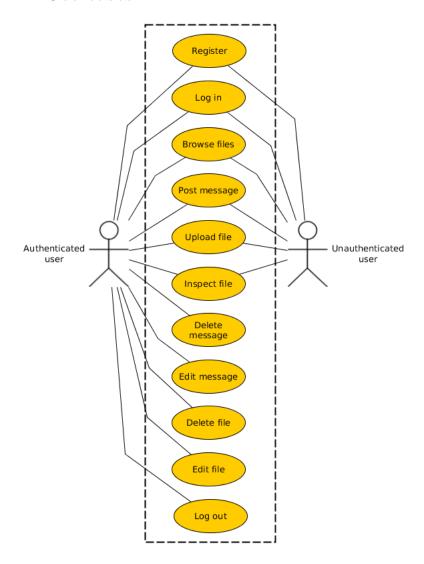
1.1 Project description

This project is a web application that enables users to upload files to the server. Users can view the uploaded files and post comments on them. Files can be searched using attached tags in addition to file names. Users can register an account on the server which allows them to control their uploaded files and messages. Registration is not mandatory.

1.2 Implementation environment

The application is implemented in PHP and runs on the University of Helsinki users-server. It uses a PostgreSQL database and Bootstrap css.

2 Use cases



2.1 User classes

Unauthenticated user Anyone on the web.

Authenticated user Someone who has created an account on the server and is currently logged in on that account.

2.2 Use cases by user class

2.2.1 Unauthenticated user

Unauthenticated users can do the following:

Browse files The user lists either all files on the server, or some subset of them by using the search function.

Inspect file / browse messages The user selects one file and is shown detailed information about it, in addition to any comments posted on that file.

Upload file The user uploads a file to the server.

Post message The user posts a message related to some file on the server.

Register The user creates an account on the service.

Log in The user logs in to an existing account on the server.

2.2.2 Authenticated user

Authenticated users can do everything unauthenticated users can. In addition authenticated users can do the following:

Edit file The user edits some of the metadata related to a file. It is possible to edit the file's name, description and tags. Other metadata or the file itself are not editable. The file must be originally uploaded by the user trying to edit it.

Delete file The user deletes a from the server. All messages related to the file are also deleted. The file must be originally uploaded by the user trying to delete it.

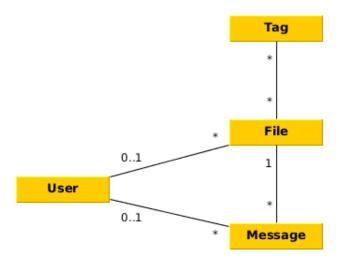
Edit message The user edits a message. The message must be originally posted by the user trying to edit it.

Delete message The user deletes a message from the server. The message must be originally posted by the user trying to delete it.

Log out The user logs out from the server and becomes and unauthenticated user.

3 Data content

3.1 Class diagram



3.2 Class attribute details

3.2.1 User

Attribute	Type	Description
User name	String	The name of the user
		account on the server.
Password hash	String	One-way hash of the
		user's password.
Password salt	String	Additional data that is
		used in the hashing
		process to increase
		security.

3.2.2 File

Attribute	Type	Description
Uploader	User	The user who uploaded
		the file to the server.
File name	String	The name of the file
File description	String	Description and
		context of the file's
		contents.
Timestamp	Timestamp	The time the file was
		first uploaded to the
		server.
File path	String	Path to the file in the
		server file system.
File size	Integer	The size of the file in
		bytes.
File type	String	The MIME type of the
		file, for example
		text/plain.

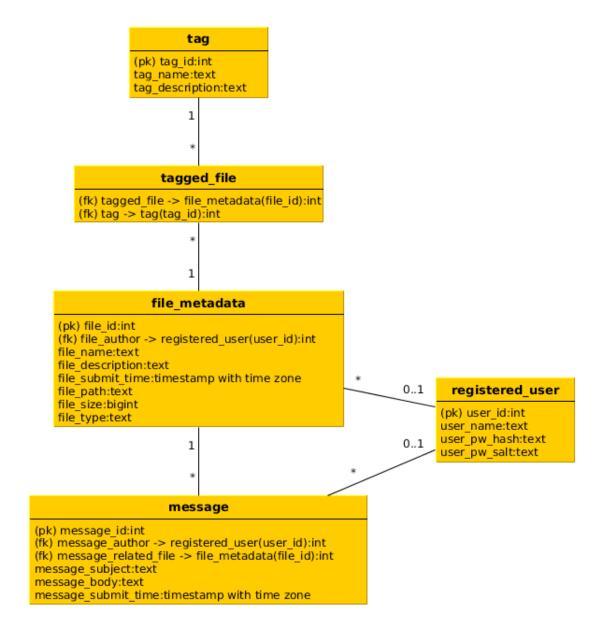
3.2.3 Tag

Attribute	Type	Description
Tag name	String	The name of the tag.
Tag description	String	Additional information
		and context relating to
		the tag.

3.2.4 Message

Attribute	Type	Description
Message poster	User	The user that posted
		the message.
Related file	File	The file that the
		message is related to.
Subject	String	The subject of the
		message.
Body	String	The content of the
		message.
Timestamp	Timestamp	The time the message
		was posted on the
		server.

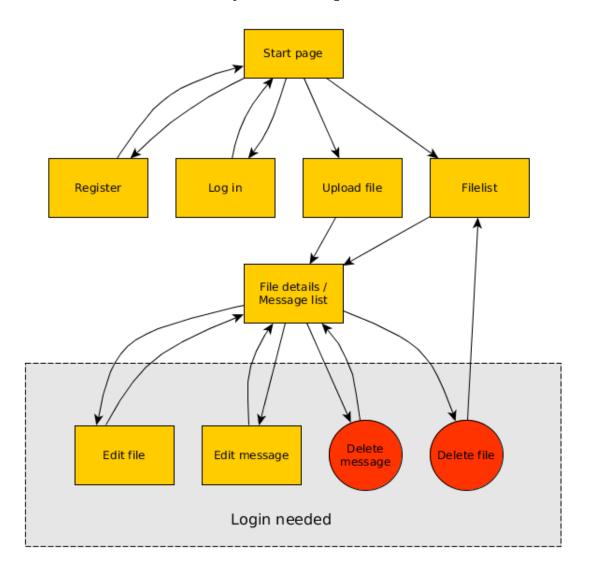
4 Database diagram



5 Application architecture

The application adheres to the MVC model. Source code is mostly located in the "app" subfolder, with further subfolders for models, views and controllers. Additional libraries are in the folders "lib" and "vendor" in the project root.

6 User interface and system components



7 Instructions for use

7.1 Uploading files

7.1.1 Uploader identification

Uploaded files will be linked to your account if you are logged in at the time you upload the file. Otherwise files will be uploaded anonymously.

7.1.2 Tags

Any tags entered when uploading a file will be linked to that file. If some of the tags don't exist, they will be created.

7.2 Editing files and messages

Editing functions can be accessed from the respective page of the file you want to edit. You must be logged in as the original uploader/poster to edit files/messages. Anonymously uploaded files and messages are not editable.