

Description of Practical Assignment “Photo Gallery”

Team of Developers

There is one student participating in the development of the system:

- Darja Solodovnikova, ds00000 (design, business logic development, user interface design, programming of controllers and models)

Development Environment

It is planned to develop the system in PHP 7.1 environment using Laravel 5.6 library. It is planned to use MySQL database for data storage. The code will be stored in the GitHub system.

Main Functionality

Within the framework of the practical assignment, it is planned to develop a web photo gallery system.

It will be possible to post photos in the system and make them available to a wider audience of the system users. The system will allow to divide photos into separate galleries and assign keywords to them. Visitors will be able to select images by a gallery, keyword or search images by the phrase that is included in the name or description.

Data Registry

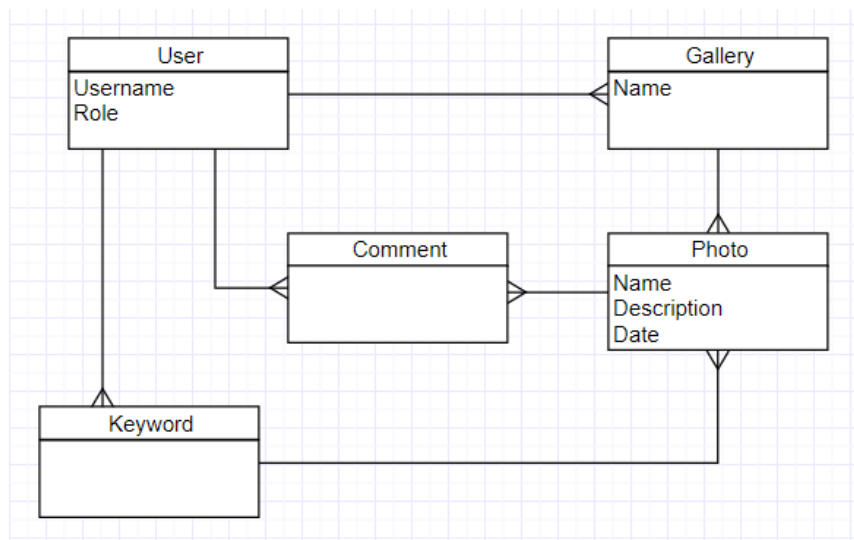
The most significant concepts in the system: photography, photo gallery, keyword, user.

The system consists of galleries, the author is one of the users. Each gallery consists of photographs. Key words are used to describe photos. Keywords are tied to a particular user, so that he/she would have the opportunity to reuse the same keyword. Comments can be added to the photos. Each comment is related to the particular user of the system.

Commented [DS1]: Who is developing the system: names and roles in the project.

Commented [DS2]: What is it planned to develop?

Commented [DS3]: The most important parts of an abstract ER model.
Picture drawn with <http://www.glify.com>



MVC

The system will be implemented following an MVC paradigm. The system will be distributed into the following components:

Models:

- User,
- Gallery,
- Comment,
- Photo,
- Keyword;

Views:

- list of galleries with a search box,
- list of photos with a search box,
- view with information about a particular photo,
- new gallery creation view,
- view for photo adding to a gallery,
- view for photo editing,
- photo deletion view,
- gallery deletion view,
- view for adding a comment to a photo,
- view for adding keywords to a photo,
- view for blocking users.

Controllers:

- GalleryController with methods for retrieving and showing a list of galleries (index), creating (create) and saving (store) a new gallery, returning a list of galleries filtered by search string in gallery name (search);
- PhotoController with methods for retrieving and showing a list of photos in a gallery (index), creating (create) and saving (store) a new photo, editing (edit) and saving changes in the database (update) of an existing photo, deleting a photo (destroy), returning a list of photos filtered by search string in photo name (search);
- AdminController with methods for retrieving and showing a list of users (index), blocking or unblocking a user (block);
- Laravel standard RegisterController and LoginController with added functionality for login with Facebook.

User Roles

The system supports a number of different user roles - a simple visitor, *Facebook* authenticated user, registered user, administrator. Each of these roles have different operations available in the system.

Simple visitor:

- see photos marked as public;
- search for public photos.

Commented [DS5]: What operations it will be possible to conduct in the system and which operations will be available to the particular users?

Facebook authenticated user:

- the same operations, as the simple user is allowed to conduct;
- the ability to add comments to photos.

Registered user:

- see photos marked as public or where the author is the registered user himself/herself;
- look for photos marked as public or where the author is the registered user himself/herself;
- add comments to the found photos;
- create new galleries;
- add photos to the gallery, edit photos, delete his/her own photos;
- add key words to his/her own photos.

Administrator:

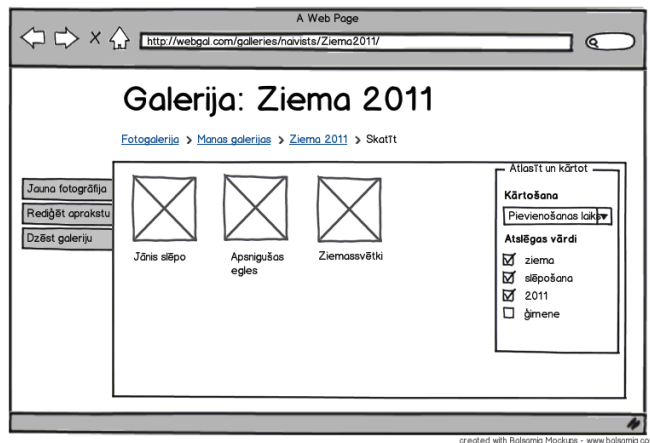
- search for photos in the whole photo store;
- delete inappropriate photos or galleries;
- block users.

User Authentication

For the user authentication, it is possible to use a local registration system or register using *Facebook* authentication. For users, who have registered through the local registration system, it is possible to link their user to their *Facebook* account.

System Interface

The image shows the form for gallery displaying. In the form a user can choose the selection criteria and specify how to arrange the results. Similarly, there are operations available to the user that can be performed with the gallery as a whole.



Commented [DS6]: In order to implement this section, it is necessary to better understand the emerging system to visualize what exactly will be generated. This subsequently facilitates programming. The image was created with "Balsamiq Mockup" free online version: <https://balsamiq.com/products/mockups/>