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PIXEL4YOU

The Year Project Specification

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1. Introduction

1.1. What is this document about?

This document includes the specification of PIXEL4YOU project that has been assigned as Year Project (1) in the 2014 winter term and that will continue to Year Project (2) in the summer term.

1.2. The main idea of the project

I have decided to realize the project PIXEL4YOU because there just a few sophisticated web galleries that would be able to offer the advantages that the social networks do. The project is focused on graphic designers, photographers, and users with this kind of interests. Project will serve for the user's work presentation, and sharing their experience, skills, and resources among them. Given that more and more people are interested in this way of art, I see in this project great perspective and the opportunity to further develop the project even after the Year Project course completion.

2. Goal

2.1. Goal of the document

The purpose of this document is to specify the PIXEL4YOU project that has been assigned as a Year Project. The document describes the meaning of the project, its functionality, features, focus, target users for whom the project has been designed and the timetable for the project development. The document mainly analyzes the project goal, basic properties, and phase formation.

2.2. Goal of the project

The goal of PIXEL4YOU project is to create a web page that groups the users focused on graphic art production, in order to share their works like photos or images, experiences, guides, tips, and resources for graphic art creation too.

2.3. Target groups of the project

Primarily, the project is designed for the range of people involved in the creation of graphic art, but also for the general public that will attend the web site in order to expand its horizons or see the work of the other users who publish their work at the web site.

2.4. Conventions in the document

The document is divided into several logical units clearly separated by headings and subheadings. Each page is numbered by the page number and there is a brief summary of the document at the first page.

3. Brief description of the project functionality

PIXEL4YOU project is going to be created as a gallery presenting the users' work with social networking features. What do I imagine this term mean?

After the successful registration, the user can upload his work on his own homepage (pixels), and thereby can present his abilities, skills, and self-image. The main idea is that the user gradually composes his personal image (portfolio) out of his pixels (works).

The production (portfolio) of each of the users can be evaluated, shared, commented, or downloaded by other users. Users can divide their work into different categories that can be easily searched and sorted.

PIXEL4YOU project home page will include randomly selected users work placed based on the date of uploading/ rating/ number of downloads, etc. This web site section will be accessible to the general public that can sort and search through the work of other users and consequently download it to own device.

Logged user can additionally evaluate and comment on those works.

4. Detailed description of the project functionality

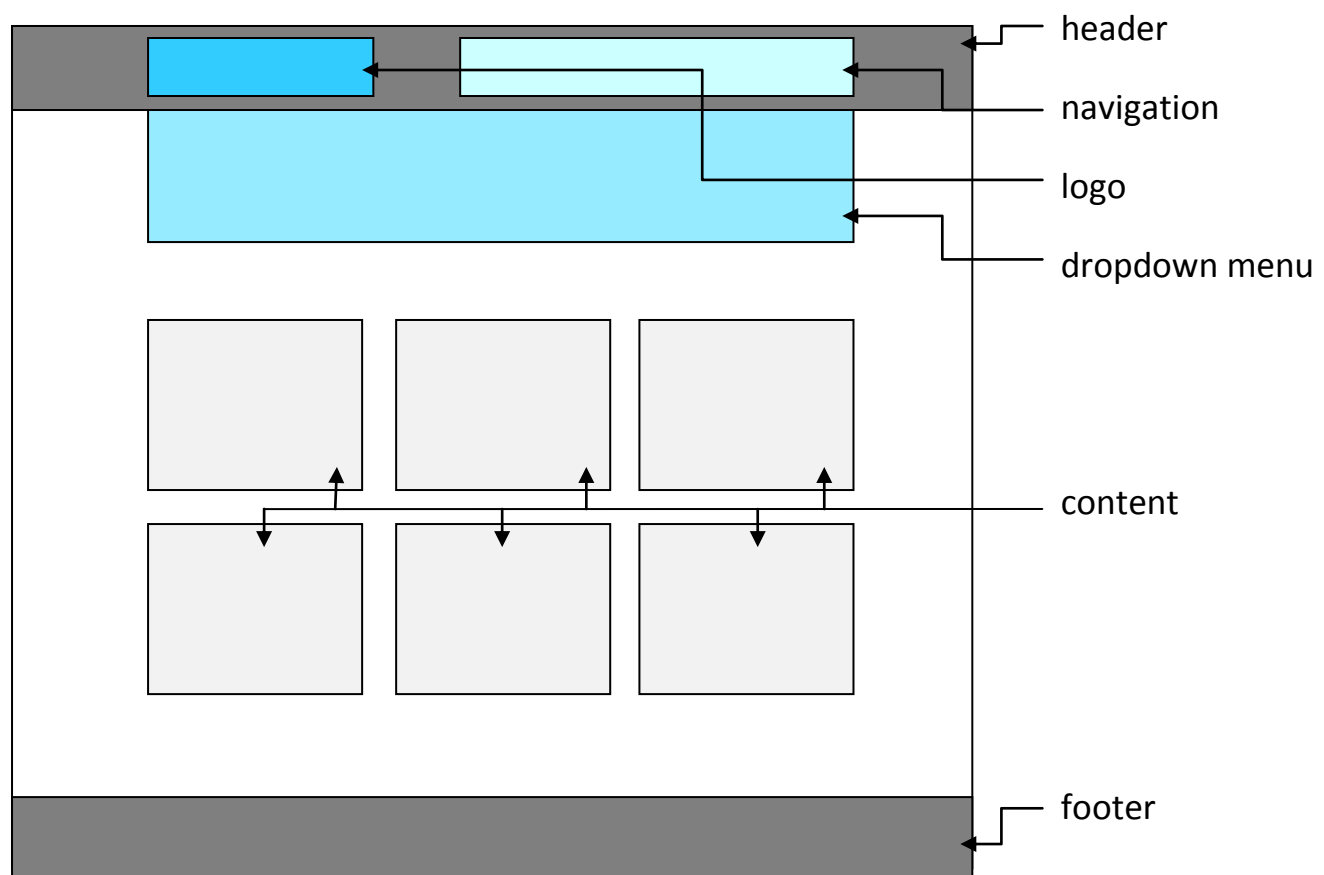
This section of the document describes the detailed characteristics of the project such as the web page appearance, functions, and features.

4.1. Visual aspect of the project

I would like to rough draft the appearance and layout of elements on the subpages.

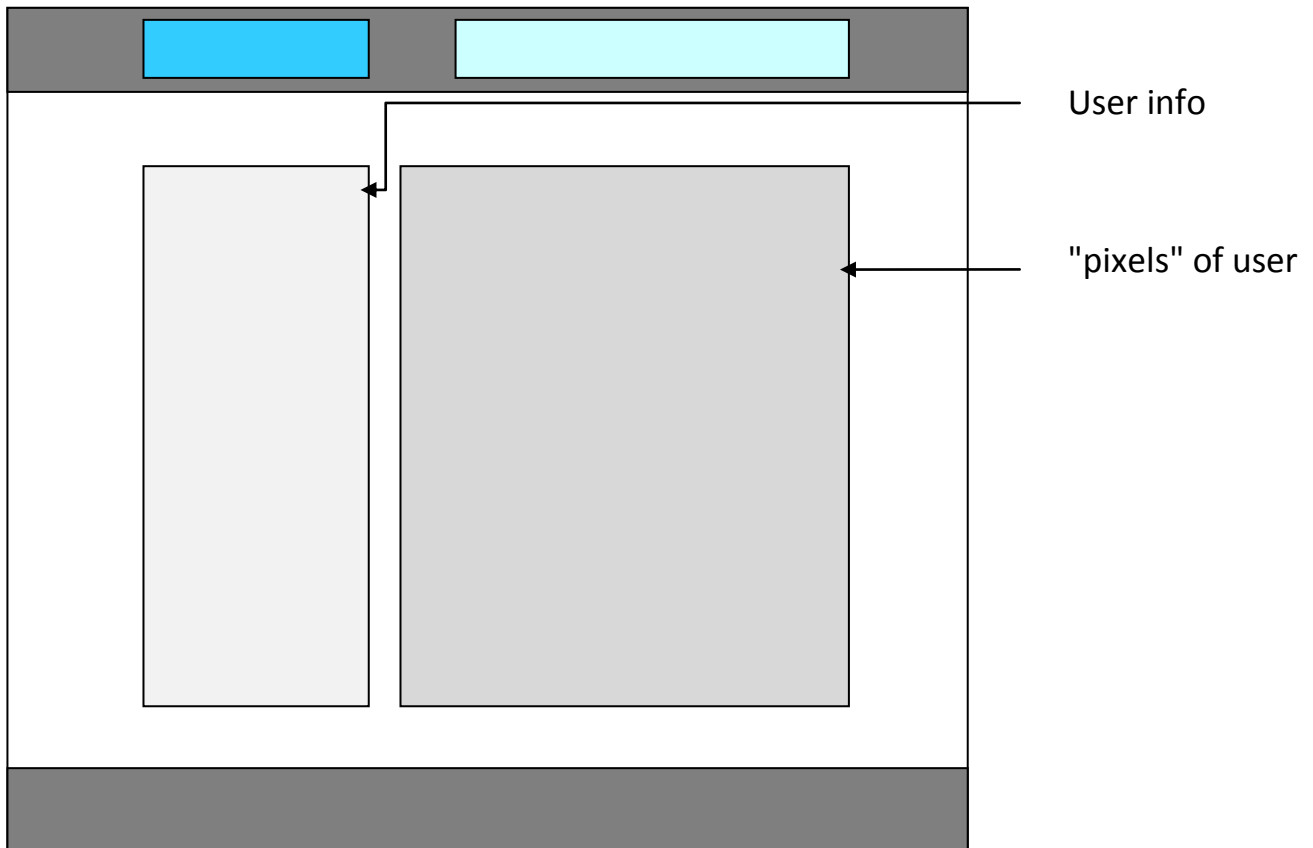
4.1.1 The main part of the web page

Image 1:



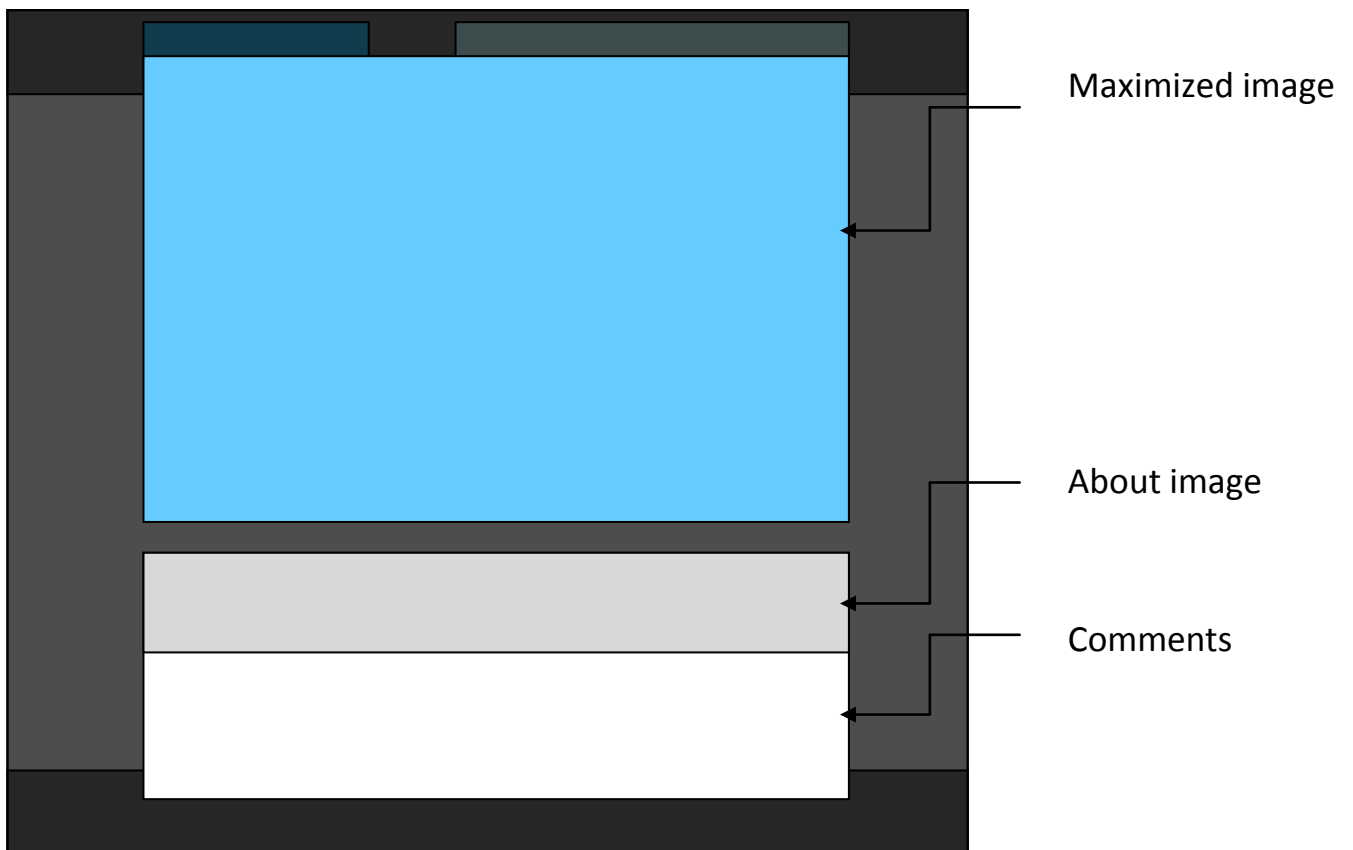
4.1.2 User's homepage

Image 2:



4.1.3 Browsing of individual image

Image 3:



4.2. Functional aspect of the project

4.2.1 Rendering the main part of the web page

The web page will be divided into three main sections:

- Header
 - To the entire width of the displayed page
 - Logo on the left
 - Navigation on the right
 - When cursor move over the header, the dropdown menu with opportunity to filter and search appears
 - This section will always be visible even after scrolling down
- Section
 - In this section the image miniatures will be generated according to the specified filtering criteria.
 - **Miniatures will contain** a brief information about the individual images, e.g.:

Table 1

Information	Function description
Title	Picture title with a link to its maximizing and showing details about it
Author	Link with the name of the author and with the reference to his/her homepage
Rating	Link with the number of positive rating and link for adding a positive evaluation.
Number of comments	Link showing the number of comments and link for adding the comments.
Number of downloads	Link showing the number of downloads and link for downloading the picture.

- **At the user's personal web page** there will be displayed **information about the user**:

Table 2

Information	Function description
Avatar	Picture that characterizes the user
Nickname	Link with the author name and with the reference to his/her homepage
Name and surname	Author name and surname
Focus	The basic description of the author's focus
About me	Information about the author
Other	Other items like comments about the author

- **Footer**
 - Follow / share icons
 - Basic information about the web page meaning
 - Copyright

4.2.2 Searching and sorting

- **Searching**
 - The user can search the author names or image titles
- **Results filtering**
 - The user can sort the results by user/ date uploaded/number of downloads
 - The user can filter the displayed results by different categories

4.2.3 User's registration

The user enters the following registration parameters:

Table 3

Information	Function parameters	Required
Login	Login is the nickname the user use	yes
Password	Login user password	yes
Avatar	Picture that characterizes the user	no
Name and surname	Name and surname of the user	yes
Focus	The basic description of the author's focus	no
About me	Information about the author	no
Email	User's e-mail address	yes
www	User's web page links	no

4.2.4 User login

After the successful login, the user will be able to manage his/her home page, comment on the works of other users, and modify the personal information.

Each work will have following characteristics that either will be entered by the user or will be generated by the server:

Tabulka 4

Information	Function description	Filled by user
id	Unique work id	no
File	Path to the file- the user will choose the file from his/her device	yes
Title	Image title	yes
Description	Brief description of the image	yes
Category	Image category	yes
Date of publication	Information about time and date of uploading the image	no
Height	Picture height	no
Width	Picture width	no
Path	Path to the file placed on the server	no
Size	Size of the file in Bytes	no

The information entered by the users will be able to edit later.

5. Solution proposal

5.1. Technological solution

Following languages will be used in this project:

- **HTML/HTML5**
 - Static section of the web site,
 - The basic layout of individual elements ,
- **Php**
 - Work with the data from the database
 - The dynamic functions from the server
- **MySQL**
 - Storing the information about works and their authors
 - Defining a query for each feature
- **Javascript**
 - The dynamic section used by users
 - The input control
 - Dynamic rendering of the data on the web page
- **CSS**
 - The visual formatting of the web page elements
 - The project will be customized to various display devices

The project will utilize following **graphic editors**:

- Adobe Photoshop CS5
- Inkscape

Programming environment used in project:

- Bluefish / Adobe Dreamweaver CS6 (html, php, css)
- PhpMyAdmin (DataBase system management)

5.2. Assignment analysis and solution outline

- Simple web page outline creation (header, section, footer) (html)
- CSS style creation (css)
- Programming of image miniatures that will be placed on the homepage and that will be a basis for advanced functionality (maximizing, rating, switching to the commenting, downloading) (html+css+js)
- Programming of maximized image view with the basis for advanced functionality (commenting, downloading, rating) (html+css+js)
- Programming of user's homepage environment – the basic functionality (showing the information about the user, showing the user's works miniatures) (html+css+js)
- Database creation - users, works,.. (mysql)
- Creation of advanced functions for data processing in the database (php+mysql)
- Project improvements

5.3. Project testing

The project will be tested on multiple devices at different resolutions.

Testing web browsers:

- Google Chrome (current PC - windows version)
- Google Chrome (current Android version)
- Mozilla Firefox(current version)
- Internet explorer (current version)

6. Project creation time schedule

6.1. The first stage

- programming of basic elements,
- creating of the main page and the user's homepage layout,
- crating of the elements for miniatures,
- applying of cascading styles.

6.2. The second stage

- Creation of user's database and database of their works
- Registration and logging of users
- Adding of images to the database
- Rendering of user's images

6.3. The third stage

- Searching of images / users
- Sorting of user's images
- Rating
- Downloading
- Editing images and information o about users

6.4. The fourth stage

- Adding the functionality for commenting the images and users
- Web page security control
- Eliminating of errors
- Testing
- Introducing to the operation