

Simplicture User and Administration Guide

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License

Simplicture, a highly simplistic, useful and *usable* gallery system.

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Simpicture Overview

About Simpicture

Users new to Simpicture are no doubt unlikely to be awed by the magnificence of a complicated software package. Instead, most new Simpicture users will find the package to be unusually simplistic (hence the name). The fundamental and philosophical intent behind Simpicture is to provide a gallery system that strives to avoid getting in the way of users who just want to post pictures. Simpicture facilitates this by utilizing a clean, attractive interface without excessive feature-bloat. As a new user to Simpicture, it is quite possible that the interface as a whole will seem intuitive, navigated easily, and user-friendly. This guide describes how to create an account, login, and start using simpicture.

Categorization

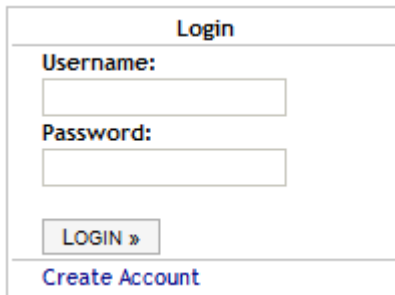
Pictures are categorized in containers called “galleries.” In other words, each picture uploaded to the system has to be assigned to a specific gallery which will be its home for the duration of the picture's lifetime. Once uploaded, pictures will appear in their associated galleries according to the latest modification date. The most recently uploaded pictures will appear on the first page of the gallery, with later pictures appearing on subsequent pages. This methodology makes finding the most recent additions to any gallery simple and straightforward. Furthermore, the top four most recently uploaded pictures will appear on the opening page of Simpicture, titled “Latest Featured Pictures.” Currently, all pictures are fair game for being “featured” on the front page¹ but are removed as soon as newer pictures take their place.

¹ Later versions of Simpicture may include an option for “promoting” a picture to the front page or disallowing it to appear as a featured picture. This will give the user a bit more control over what sort of images are to be allowed on the front page.

Account Creation and Logging In

Creating an Account

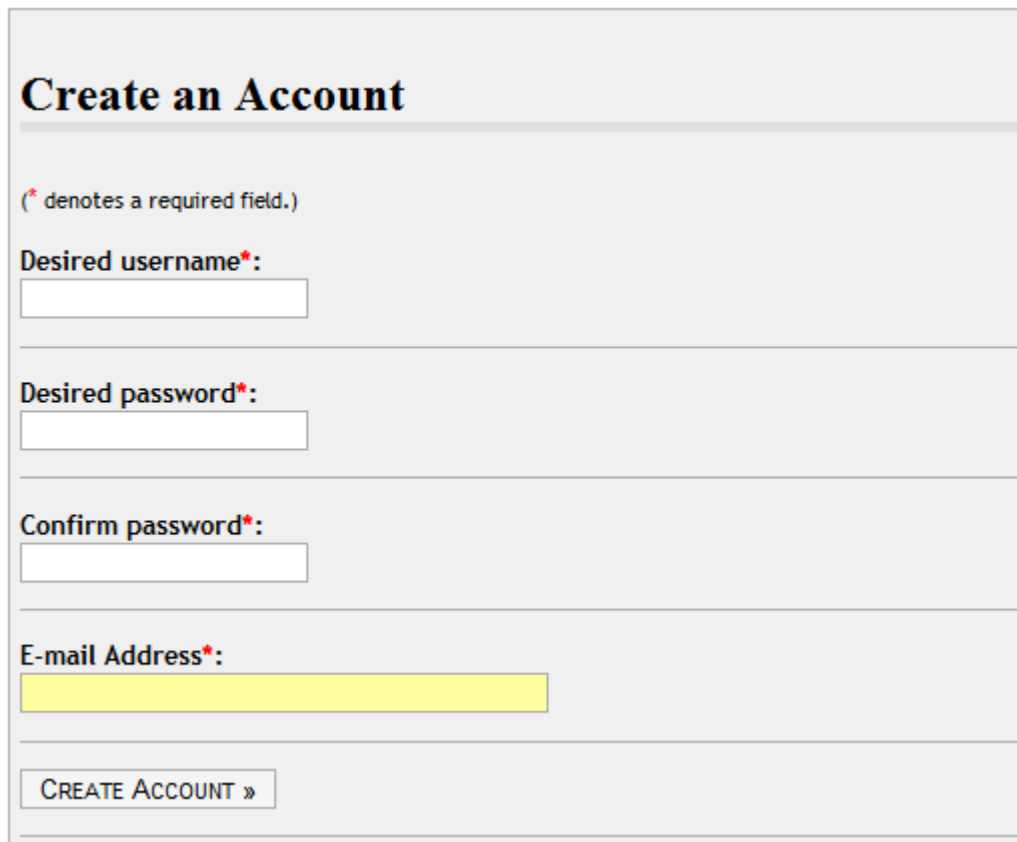
Creating an account in Simplicture is a simple, straightforward process. Simply click “Create Account” on the bottom of the login box as shown in Figure 1:



The image shows a login form titled "Login". It contains two input fields: "Username:" and "Password:". Below the password field is a button labeled "LOGIN »". At the bottom of the form, there is a blue link labeled "Create Account".

Figure 1

Next, to create an account, fill in your desired user details and click the “create account” button (figure 2). This will create an account in Simplicture, ready to upload new pictures!



The image shows a form titled "Create an Account". It includes a note: "(* denotes a required field.)". The form has four required fields: "Desired username*", "Desired password*", "Confirm password*", and "E-mail Address*". Each field has a corresponding input box. At the bottom of the form is a button labeled "CREATE ACCOUNT »".

Figure 2

Logging In

Once you have created an account, type in the username and password you provided during the creation process in the login box pictured in figure 1 (previous page) and click “login.” This will take you to a confirmation page if your login was successful; if not, never fear! You will be asked to provide your username and password a second time if the first time was unsuccessful.

Upon logging in, you may notice that the login box has transformed into something else: A user control panel box. By clicking on the various links provided in this box, you can change your account details (such as the e-mail address and password associated with your account), view a very simple text-only list of all the images you have uploaded, or upload new pictures. Additionally, there is a “logout” link at the bottom of the “logged in” box which provides a quick means of terminating your current session and logging out the user.

Note: Depending on the configuration of the server's Servlet and JSP container, sessions left idle for 30 minutes may be automatically terminated. This is outside the scope of Simplicture's control, so if your account appears to have been logged out even though you never clicked this link, it is most likely the result of the default session timeout as configured on your server. However, closing your browser will also terminate your session. Neither of these situations will hurt Simplicture; instead, simply log back in and continue using the system as normal.

Uploading Pictures

Uploading pictures to Simpicture is a straight-forward process that simply involves naming your picture, providing a description, browsing to where the picture is stored on your computer, and providing a gallery in which your picture may live. The “upload picture” dialog can be accessed by clicking on the “Upload Picture” in your “Logged in As” box and appears as follows:

My Account | My Pictures | Upload Picture

Upload Picture

Picture Title*: « No title

Picture Description:

Picture to Upload*: Browse... « No file provided

Assign this Picture to the Gallery:

* denotes required fields.

UPLOAD PICTURE

Figure 3: Uploading Pictures

Only the picture title and picture upload required: Everything else can remain blank or selected to their default settings (as is the case with the gallery location). When you have selected the picture you wish to upload, simply click the “upload picture” button and your browser will begin the upload process.

Warning! Canceling the upload process at any time by closing your browser window may result in an improperly recorded entry in Simpicture's database! If this happens, you should be able to delete the entry and try again. More on editing and deleting pictures later.

Browsing Galleries

Once you have uploaded a few pictures to Simplicture, it is often desirable to review the fruits of your labors and view your new additions to the galleries. Simply click on the gallery you wish to browse from the right-hand box titled “General Galleries,” and you will be presented with a selection of pictures. If there are enough pictures in the gallery you've elected to browse, you will notice a small string of text toward the upper- and lower-left hand portions of the gallery that provide you with the total number of pages. Clicking on a page number will take you to whichever additional page you wish to browse. Note: Page 1 is always the first page and will always contain the latest entries in Simplicture.

While users are not able to create galleries themselves, your administrator may have created several galleries for you to choose from. The default gallery will always be named “General” (unless the administrator has opted to change its name) and will always be accessible. Additional galleries will often be listed below this, and you can browse their contents by clicking on their name.

Galleries will always show a thumbnail view of the pictures they contain. The thumbnail is a scaled down version of the parent image, which allows for more easily selecting which picture you wish to view. In addition, each thumbnail picture contains a title (above the picture), who uploaded it, the date it was uploaded, and the total picture file size (below the picture).

Viewing Pictures

Viewing pictures is just as easy as browsing through a Simplicture gallery. To view a larger version of the thumbnail picture, simply click the picture or click its title and you will be taken to Simplicture's "viewer." The viewer provides the full-scale version of the image, its description, and an option to download the image to your computer. If you click on the download link, you will be provided with the original file name the picture was uploaded with and can then select the location you wish to save the picture to. Additionally, if you're logged in as the picture's owner, you may choose to edit or delete the picture by clicking the respective links at the top (highlighted in red).

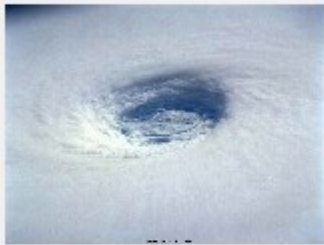
Editing or Deleting Pictures

Currently, there are two ways to access the picture editor and deletion mechanisms. With the first method, you can simply browse to the picture you wish to edit or delete, click it, and then choose “edit” or “delete” from the top of the viewer's dialog (assuming you own the picture, of course). Under the second method, simply click “My Pictures” from the “Logged in As” dialog in the right-hand navigation bar and either click the picture's title (to ensure it is the correct picture) or click the edit or delete links.

The picture editor dialog looks very similar to the picture upload menu with one minor difference: It shows a thumbnail version of the picture and all the other details are pre-filled.

Edit Picture: Hurricane Eye

Picture Title*:



Picture Description:

Change Gallery Assignment: ▼

* denotes required fields.

Figure 4: Edit Picture

If you wish to make any changes, simply update the title, description, or gallery and click “update

picture.” Once updated, the changes made to the picture will be immediately visible in the gallery and picture views.

Deleting Pictures

Deleting pictures is a bit easier than editing and consists of simply clicking the “delete” link, either from your account page or from the picture's viewer page, and clicking the button “Yes, I wish to delete this picture.” Once clicked, the picture is deleted and you are taken to a confirmation page. If any errors occur in the process, the confirmation page will display what errors occurred which you can provide to your system administrator.

Editing User Details

To edit the user details of your account, simply click on the “My Account” link under the “Logged in As” navigation box. This will provide you with a means of altering your e-mail address and password. If you do not provide both your old password and new password (in addition to the confirm new password), only the e-mail address will be changed (if it is different from the previous one).

Administration

System administration for Simplicture is provided through the “admin” account—the default administrative account provided when Simplicture is installed. The “admin” account by default is set to use the password “admin” and has access to all administrative features, can add and delete users, pictures, and galleries.

Logging in as the Administrator

To log in as the administrator, you may either use an account flagged as an administrator or (more likely) the default administration account “admin,” which uses the password “admin” by default. Logging in with the administrative user is accomplished in the same manner as an ordinary login as discussed on page 3.

Using Administrative Features

The administrative features are accessible from the same dialog that provides access to the user account details, picture details, and picture upload facilities. Simply click on the “administrative features” link and you will be presented with a fairly sparse menu that affords methods to add, remove, and edit users, galleries, and pictures. Initially, the administrative section presents you with four basic statistics regarding Simplicture, as illustrated in figure 5:

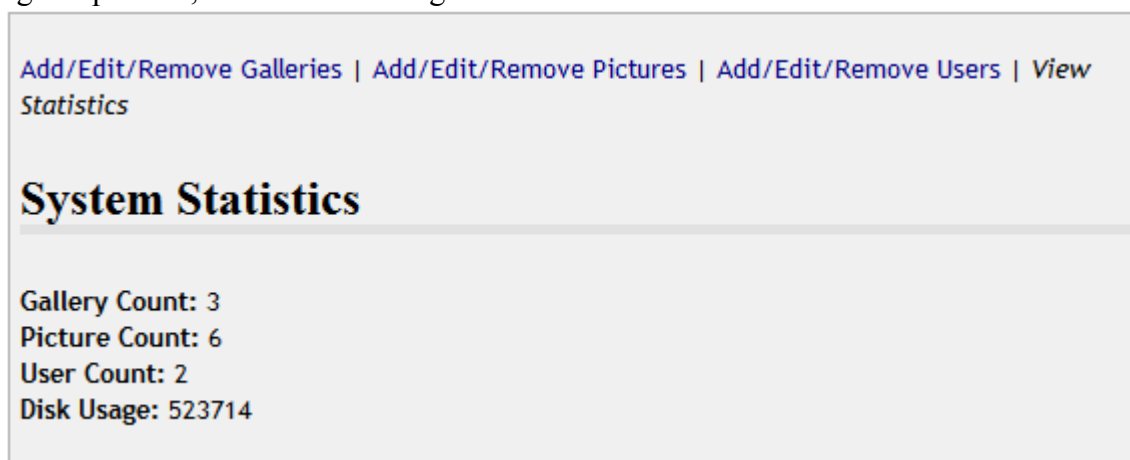
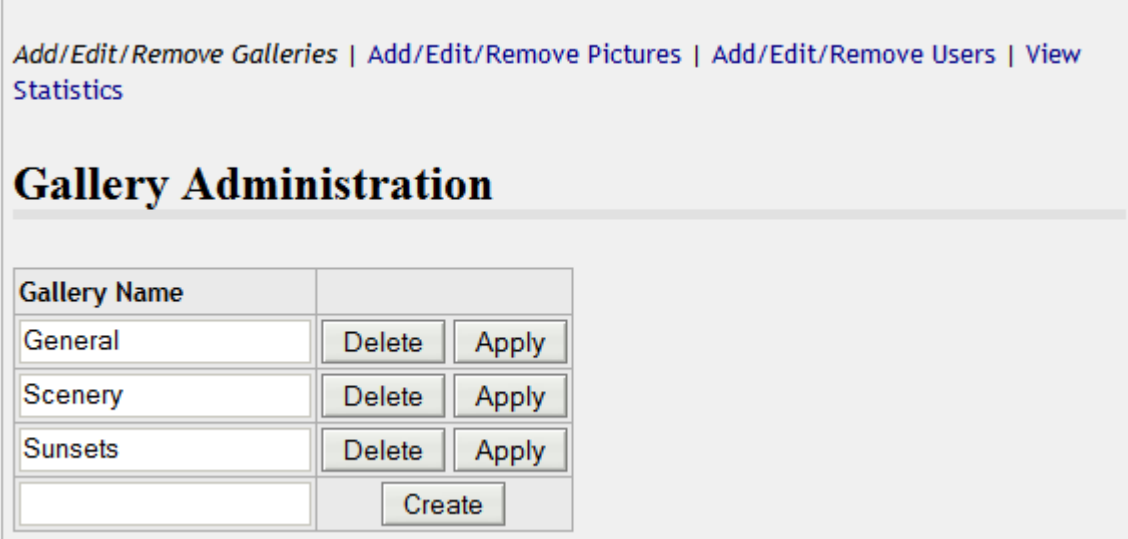


Figure 5: Administrative Statistics

Count statistics simply govern the total number of galleries, pictures, or users registered in the database. Disk usage is calculated based upon the file size of each picture during the upload process. Note that it is entirely possible for the disk usage calculations to be slightly off; in the event a picture is removed from the file system, the disk usage will be calculated from the values contained in the database, rather than on-disk. Later versions of Simplicture may provide a synchronization feature to ensure that the database and disk usage calculations remain identical.

Adding, Editing, and Removing Galleries

To add, edit, or remove a gallery, click on the “Add/Edit/Remove Galleries” link from the administrative features menu. You will then be presented with a menu that appears as follows:



The screenshot shows a web interface for gallery administration. At the top, there are navigation links: [Add/Edit/Remove Galleries](#), [Add/Edit/Remove Pictures](#), [Add/Edit/Remove Users](#), and [View Statistics](#). Below this is a section header **Gallery Administration**. The main content is a table with the following structure:

Gallery Name	
General	Delete Apply
Scenery	Delete Apply
Sunsets	Delete Apply
	Create

Figure 6

New galleries can be created by providing a name in the lower-most text box and pressing the “Create” button. Existing galleries can be renamed by changing the text displayed in their corresponding text box and pressing the “Apply” button. Furthermore, individual galleries may be deleted by pressing their associated “Delete” button. Before a gallery is deleted, however, you will be presented with a confirmation dialog to ensure that the selected gallery is in fact the one you wish to delete.

Warning: *Deleting a gallery will remove ALL pictures associated with that gallery.*

Adding, Editing, and Removing Pictures

Picture editing, adding, and removal is provided through a means similar to that for standard user accounts (adding a picture should be done through the administrator's own private "Upload Picture" feature). When selecting the "Add/Edit/Delete Pictures" link from the administration menu, you'll be provided with a dialog similar to the one in figure 7:

[Add/Edit/Remove Galleries](#) | [Add/Edit/Remove Pictures](#) | [Add/Edit/Remove Users](#) | [View Statistics](#)

Picture Administration

	Picture Title (click to view)	Date Added	Edit/Delete functions	
1	747 Into the Sunset	April 23, 2007	Edit	Delete
2	Space Shuttle Loading	April 23, 2007	Edit	Delete
3	Oblique view of Earth from Space	April 20, 2007	Edit	Delete
4	Hurricane Eye	April 20, 2007	Edit	Delete
5	Moon from a Distance	April 20, 2007	Edit	Delete
6	Another Space Picture	April 20, 2007	Edit	Delete

Each picture can be viewed separately by clicking on the picture's title. Editing or deleting a picture is performed exactly as under standard user accounts as discussed on page 7 and is handled through the same dialogs.

Adding, Editing, and Removing Users

The add, edit, and remove dialog for user accounts is quite similar in design to the dialog used for editing, removing, and adding galleries. Here is an example of the user editor in figure 8:

[Add/Edit/Remove Galleries](#) |
 [Edit/Remove Pictures](#) |
 [Add/Edit/Remove Users](#) |
 [View Statistics](#)

User Administration

Note: The admin user is not listed here and the properties for the administration account cannot be changed unless you are logged in as that user.

Username	Set Password	Is Admin?	Is Enabled?	Misc
test	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Apply"/> <input type="button" value="Delete"/>
test2	<input type="text"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Apply"/> <input type="button" value="Delete"/>
zancarius	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Apply"/> <input type="button" value="Delete"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Create"/>

Figure 8: User editor.

The user editor contains two columns for controlling the user's access to various parts of Simplicture. The “is admin?” column controls whether or not a user is an administrative-capable account. Likewise, the “is enabled?” column controls the user's ability to log into the system and upload pictures. Note: **all user accounts are disabled by default as per version 0.2.**

Adding a user through the administration user editor simply requires 1) entering a username in the empty text box at the very bottom of the user list, 2) supplying a password under set password, 3) determining whether a user should be an administrator or not, 4) choosing whether or not the account should be enabled by default, and 5) pressing the “create” button. This will create a user with the assigned criteria in the database and, once created, will return you to the user creation dialog.

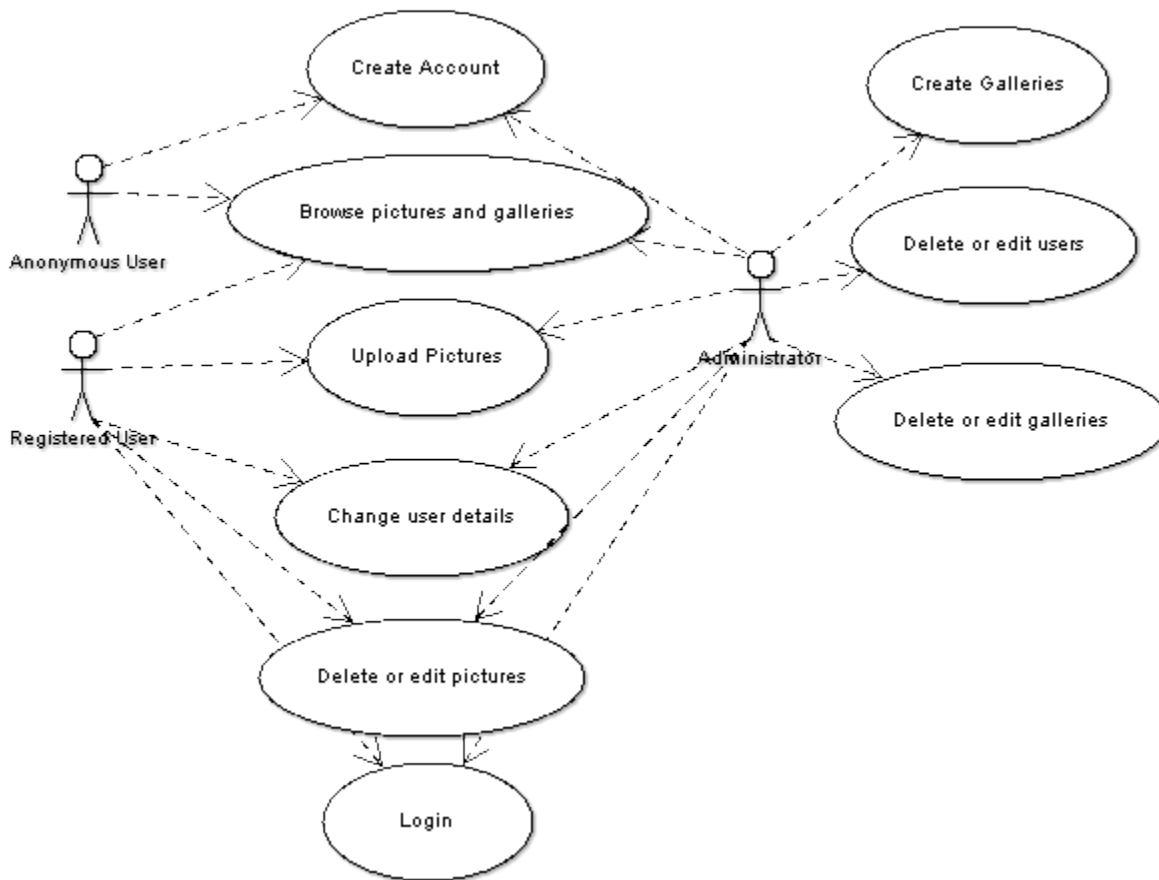
Likewise, removing a user from the system is as simple as clicking the “delete” button, which will supply a confirmation question to which a second button press is require to complete the deletion.

Warning: Deleting a user account will delete ALL pictures associated with that account.

Developer Notes

This section contains diagrams and notes necessary for developer work on Simplicture. API documentation is not provided here; however, the source is commented with extensive JavaDocs and as such, the API documentation can easily be derived from the source.

Use Case Diagram



The Simplicture use case diagram demonstrates each feature as it exists in the context of a use case. In the use case, three actors are considered: the anonymous user, registered user, and administrator. Anonymous users in this context are considered to be anyone who has not logged in. Registered users are users who have registered an account on the system and are logged in. Administrators are users who have been flagged as the admin (or the special-purpose *admin* account) and are therefore fulfilling the administrative role within the system.

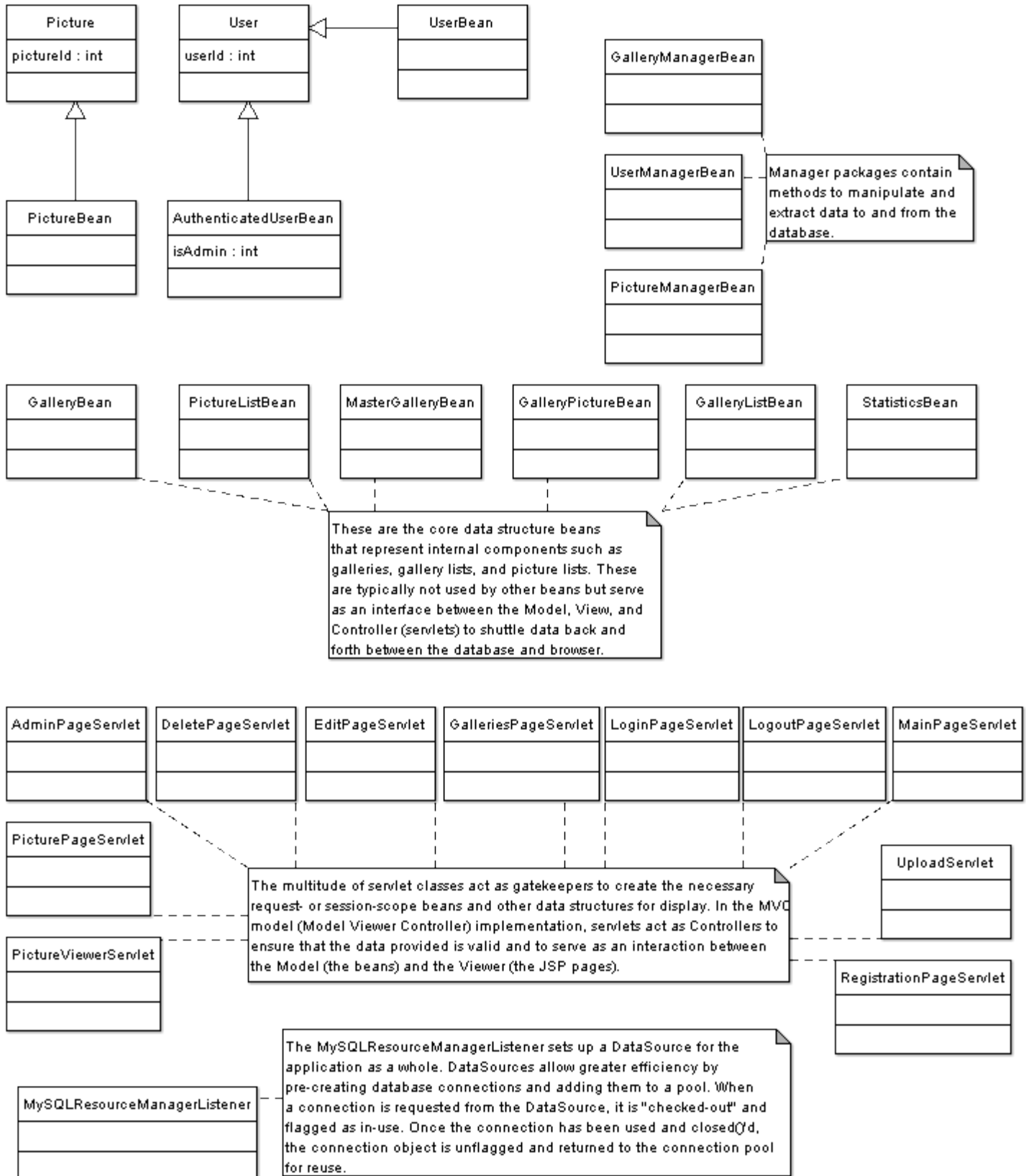
Anonymous users are limited to the extent with which they can interact with the system. The only feature available to the anonymous user are account creation and browsing pictures or galleries. Anonymous users cannot view a list of users, upload pictures, or manipulate other data within Simplicture. Neither can anonymous users login, as they must first possess an account.

Registered users can fulfill a wide variety of roles. They can browse pictures and galleries, uploadp

ictures, change account details (for their account only), delete or edit pictures they own, and login. The registered user is a fairly powerful role and is the primary content-generating role within Simpicture.

The administrator is the most powerful account on the system and exists, by default, as the “admin” user (password “admin”). The administrator can perform all of the roles that an anonymous and registered user performs with the additional interaction available of creating galleries, editing or deleting users, and editing or deleting galleries. Gallery creation has been limited exclusively to the realm of the administrator for the purpose of reducing the number of excessive “global” galleries to the database.

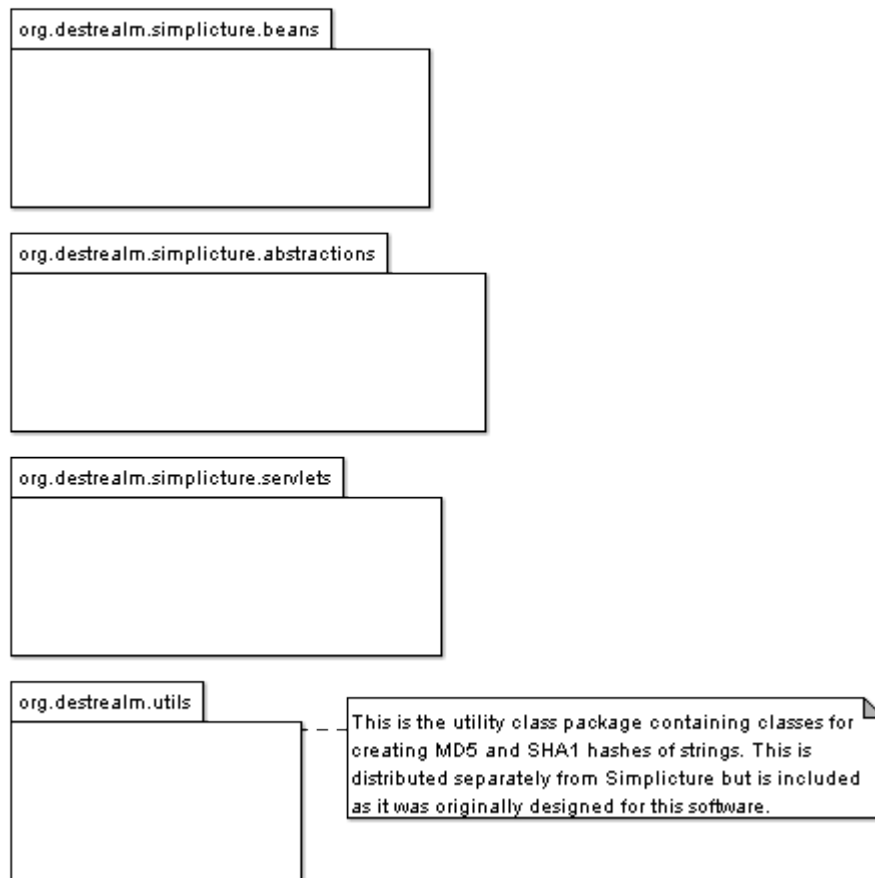
Core Class Diagram



The core class diagram demonstrates each class that resides in a variety of packages within the Simplicture hierarchy. Due to the extensive nature of the diagram, private members, with the notable exception of a few minor cases, methods, mutators, and other associations are not provided. For more detailed notes regarding each method, mutator, and member of these classes, consider extracting the JavaDocs from the Simplicture source.

There are three categories of classes within the Simplicture application context: abstractions (abstract, cannot be instantiated foundation classes), beans, and servlets. Each of these categories lives within a separate package, as illustrated in the package diagram below:

Package Diagram



The beans package contains classes that represent a variety of things, ranging from data structures to utilities to separate “manager” classes that provide methods for controlling or manipulating data. The abstractions package contains a few small, but important, foundations from which several of the data beans are derived. And, finally, the servlets package contains classes used in the numerous Simplicture servlets. Each component is designed to perform one small, specific task within the confines of Simplicture and is fairly well-documented. Generally, most questions regarding the functionality of individual Simplicture components can be answered by reading the source and comments associated with the component in question. Not everything is commented, of course. Obvious logic, in the spirit of Rob Pike remains uncommented for the sake of clarity as most variable names are descriptive. Only in exceptional cases are comments provided in detail.

Simplicture Design (Internal)

Simplicture follows the MVC design, or Model, View, and Controller. In the MVC design paradigm, the Model portion of the design consists of business logic. As this translates to Simplicture, the Model is contained within the beans. Business logic, data flow and organization, and even data structures are all represented by individual Java beans within the `org.destrealm.simplicture.beans` package. The View is represented by the various JSP pages that serve the exclusive purpose of providing the user interface for Simplicture. By removing code and business logic from the JSPs, changing the look and feel of simplicture is largely trivial. Furthermore, adding simple template logic would be quite easy, and it is not impossible for some minor changes to be made, allowing users to select from a variety of prefabricated templates that would allow further customization of the Simplicture experience. Lastly, the Controller in the case of Simplicture is handled by the servlets. Each servlet is mapped on a one-to-one basis against a JavaServer Page (or View). By forwarding requests from servlets to the JSPs using a `RequestDispatcher`, Simplicture is able to setup the environment expected by each JSP and its containing JSTL, either through the use of request, session, or application attributes. The MVC design philosophy has been highly useful in structuring Simplicture as it promotes task delegation and a sensible separation of logic from presentation.

Simpicture ERD

Simpicture's ERD for the current developmental version of Simpicture has been highly simplified from the original projected version. Changes in the direction of complexity reduction were made mostly for the purpose of finishing Simpicture within a reasonable timeframe and because of the intent to keep Simpicture fairly simple without unnecessary feature creep. As a result, Simpicture's current database design possesses a meager three tables: pictures, users, and galleries. Both users and galleries have a one-to-many relationship with pictures, as a single user can post many pictures and a single gallery can contain many pictures. Beyond this, Simpicture database relationships are fairly straightforward.

