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SOFTWARE HANDBUCH

'backend
by andrea'

CMS & blog software with frontend / backend

README

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'backend
by andrea'

CMS & blog software with frontend / backend

Abstract

'backend by andrea' is one of thousands of Content Management Systems out there on the Internet. Started as a simple blog software written in PHP 2010, it was growing more and more. Over the years, several new features were implemented, very early a MySQL database for storing all data, a gallery and photo module, multi user 2FA login and roles with privileges - and of course some fancy gadgets for the blog (e.g. feed, tags), the heart of the software. Everything controllable by a functional lightweight backend.

Table of Contents

| | |
|------------------------------|----|
| 1. License..... | 4 |
| 2. Requirements..... | 4 |
| 3. Files..... | 4 |
| 4. Tables..... | 6 |
| 4.1. ba_base..... | 6 |
| 4.2. ba_blog..... | 8 |
| 4.3. ba_blog_history..... | 10 |
| 4.4. ba_blogcategory..... | 11 |
| 4.5. ba_blogroll..... | 12 |
| 4.6. ba_comment..... | 12 |
| 4.7. ba_gallery..... | 14 |
| 4.8. ba_home..... | 14 |
| 4.9. ba_languages..... | 15 |
| 4.10. ba_options..... | 16 |
| 4.11. ba_options_str..... | 17 |
| 4.12. ba_photos..... | 19 |
| 4.13. ba_profile..... | 20 |
| 4.14. ba_profile_tables..... | 21 |
| 4.15. backend..... | 22 |
| 5. Contact..... | 24 |
| 6. Credits..... | 25 |
| 7. Appendix..... | 26 |

1. License

This program is distributed under GNU GPL 3
Copyright (C) 2010-2018 Andrea Kleinschmidt <ak81 at
osciloworld dot de>

This program includes a MERGED version of PHP QR Code
library
PHP QR Code is distributed under LGPL 3
Copyright (C) 2010 Dominik Dzienia <deltalab at poczta dot
fm>

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<<http://www.gnu.org/licenses/>>.

2. Requirements

'backend by andrea' is running on PHP Version 5.6 with
following extensions: curl, date, dom, exif, fileinfo, gd,
hash, mbstring, mysql, mysqli, mysqlnd, openssl, pcre,
session, SimpleXML, zlib - and MySQL Version 5.5.

3. Files

The repository contains following files (with notes):

```
/
.htaccess (change RewriteBase)
COPYING
```

*** Files ***

README
ajax.js
ajax.php
atom.php
backend.php
feed-icon-14x14.png
index.php
phpqrcode.php (MERGED version of PHP QR Code library)
qrcode.php
scroll.js
style.css (feel free to modify colors, pixels, etc.)
suggest.txt (fill with your own word list)
thumbnail.php
tpl_atom.xml
tpl_backend.htm
tpl_default.htm (change theme by your needs but keep the
{module} placeholders)
version.php (contains software version number before last
commit)

classes/
.htaccess
class.atom_controller.php
class.atom_model.php
class.atom_view.php
class.ba_getcontroller.php
class.ba_model.php
class.ba_model_admin.php
class.ba_model_base.php
class.ba_model_blog.php
class.ba_model_comment.php
class.ba_model_home.php
class.ba_model_languages.php
class.ba_model_photos.php
class.ba_model_profile.php
class.ba_model_upload.php
class.ba_postcontroller.php
class.ba_session.php
class.database.php (change path to database.ini)
class.getcontroller.php
class.model.php
class.model_blog.php
class.model_home.php
class.model_photos.php
class.model_profile.php

*** Files ***

```
class.postcontroller.php
class.view.php
define.php (choose default locale for frontend)
define_backend.php (choose default locale for backend)
```

```
languages/
.htaccess
language_de-DE.xml
language_en-US.xml
```

Create a file called 'database.ini' with your login data for mysql database:

```
--- start file database.ini ---
[database]
host = ""
user = ""
pass = ""
name = ""
aes_key = ""
; create aes key with shell: openssl rand -hex 16
; store ini file in a safe space (better outside www-root)
--- end file database.ini ---
```

Create folder 'jpeg' and 'video' for images and videos linked in blog entries. Create folder 'cache' for zipped feeds, protect with '.htaccess' file.

4. Tables

First, a MySQL database is needed:

```
mysql> CREATE DATABASE backend_db;
```

```
Database Collation is utf8_general_ci
All tables with TABLE_COLLATION = utf8_general_ci
```

4.1. ba_base

Contains data about the website, elements of the navigation bar and default start page.

*** Tables ***

```
mysql> CREATE TABLE ba_base (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_title VARCHAR(32) NOT NULL,
ba_description VARCHAR(128) NOT NULL,
ba_author VARCHAR(64) NOT NULL,
ba_nav VARCHAR(32) NOT NULL,
ba_nav_links VARCHAR(256) NOT NULL,
ba_startpage VARCHAR(8) NOT NULL);
```

| Field | Type | Null | Key |
|----------------|------------------|------|-----|
| ba_id | int(10) unsigned | NO | PRI |
| ba_title | varchar(32) | NO | |
| ba_description | varchar(128) | NO | |
| ba_author | varchar(64) | NO | |
| ba_nav | varchar(32) | NO | |
| ba_nav_links | varchar(256) | NO | |
| ba_startpage | varchar(8) | NO | |

| Default | Extra |
|---------|----------------|
| NULL | auto_increment |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |

```
mysql> INSERT INTO ba_base (ba_title, ba_description,
ba_author, ba_nav, ba_nav_links, ba_startpage) VALUES
("user", "description", "Jane Doe",
"home,profile,photos,blog", "url|link_1,url|link_2",
"home");
```

*** Tables ***

```
+-----+-----+-----+-----+
| ba_id | ba_title | ba_description | ba_author |
+-----+-----+-----+-----+
|      1 | user     | description    | Jane Doe  |
+-----+-----+-----+-----+
| ba_nav          | ba_nav_links          |
+-----+-----+-----+-----+
| home,profile,photos,blog | url|link_1,url|link_2 |
+-----+-----+-----+-----+
| ba_startpage |
+-----+-----+
| home         |
+-----+-----+
```

Column `ba_nav` contains a comma separated list of the software modules. Column `ba_nav_links` contains an optional comma separated list of links with pattern `'url|link_text'` used for HTML `link_text`

4.2. ba_blog

The `blog`, contains all entries and additional data (category, tags, etc). First entry is used as an intro text and is connected to all comments without relation.

```
mysql> CREATE TABLE ba_blog (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_userid INT UNSIGNED NOT NULL,
ba_datetime DATETIME NOT NULL,
ba_alias VARCHAR(64) NOT NULL,
ba_header VARCHAR(128) NOT NULL,
ba_intro VARCHAR(1024) NOT NULL,
ba_text VARCHAR(11264) NOT NULL,
ba_video_id VARCHAR(32) NOT NULL,
ba_photo_id VARCHAR(128) NOT NULL,
ba_catid INT UNSIGNED NOT NULL,
ba_tags VARCHAR(128) NOT NULL,
ba_state TINYINT UNSIGNED NOT NULL);
```

*** Tables ***

| Field | Type | Null | Key |
|-------------|---------------------|------|-----|
| ba_id | int(10) unsigned | NO | PRI |
| ba_userid | int(10) unsigned | NO | |
| ba_datetime | datetime | NO | |
| ba_alias | varchar(64) | NO | |
| ba_header | varchar(128) | NO | |
| ba_intro | varchar(1024) | NO | |
| ba_text | varchar(11264) | NO | |
| ba_videoid | varchar(32) | NO | |
| ba_photoid | varchar(128) | NO | |
| ba_catid | int(10) unsigned | NO | |
| ba_tags | varchar(128) | NO | |
| ba_state | tinyint(3) unsigned | NO | |

| Default | Extra |
|---------|----------------|
| NULL | auto_increment |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |

Blog entries can have four states:

- CREATED
- EDITED
- APPROVAL
- PUBLISHED

Only published entries will be shown on frontend.

Blog text can be formatted by the following syntax:

```
~bold{text}
~italic{text}
~link{url|text}
```

*** Tables ***

```
~list{text1|text2|text...}  
~image{name}
```

and will lead to an equivalent HTML output with inline tags , <i>, <a>, and . Image name is the filename of the image in the 'jpeg' folder without '.jpg' extension.

4.3. ba blog history

Each trigger for INSERT, UPDATE, DELETE in the table ba_blog will write the datetime (when) and the userid (who) to the history table of the blog.

```
mysql> CREATE TABLE ba_blog_history (  
history_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
history_datetime DATETIME NOT NULL,  
history_info VARCHAR(8) NOT NULL,  
ba_blogid INT UNSIGNED NOT NULL,  
ba_userid INT UNSIGNED NOT NULL);
```

| Field | Type | Null | Key |
|------------------|------------------|------|-----|
| history_id | int(10) unsigned | NO | PRI |
| history_datetime | datetime | NO | |
| history_info | varchar(8) | NO | |
| ba_blogid | int(10) unsigned | NO | |
| ba_userid | int(10) unsigned | NO | |

| Default | Extra |
|---------|----------------|
| NULL | auto_increment |
| NULL | |
| NULL | |
| NULL | |

```
mysql> CREATE TRIGGER trigger_ba_blog_insert  
AFTER INSERT ON ba_blog  
INSERT INTO ba_blog_history  
(history_datetime, history_info, ba_blogid, ba_userid)  
VALUES (NOW(), "created", NEW.ba_id, NEW.ba_userid);
```

*** Tables ***

```
mysql> CREATE TRIGGER trigger_ba_blog_update
AFTER UPDATE ON ba_blog
INSERT INTO ba_blog_history
(history_datetime, history_info, ba_blogid, ba_userid)
VALUES (NOW(), "modified", NEW.ba_id, NEW.ba_userid);
```

```
mysql> CREATE TRIGGER trigger_ba_blog_delete
BEFORE DELETE ON ba_blog
INSERT INTO ba_blog_history
(history_datetime, history_info, ba_blogid, ba_userid)
VALUES (NOW(), "deleted", OLD.ba_id, OLD.ba_userid);
```

```
+-----+-----+-----+-----#
| Trigger          | Event  | Table  | Statement  #
+-----+-----+-----+-----#
| trigger_ba_blog_insert | INSERT | ba_blog | INSERT INTO #
| trigger_ba_blog_update | UPDATE | ba_blog | INSERT INTO #
| trigger_ba_blog_delete | DELETE | ba_blog | INSERT INTO #
+-----+-----+-----+-----#
#-----#
#-----#
# ba_blog_history (history_datetime, history_info, #
# ba_blog_history (history_datetime, history_info, #
# ba_blog_history (history_datetime, history_info, #
#-----#
#-----#
#-----#
# ba_blogid, ba_userid) VALUES(NOW(), "created",#
# ba_blogid, ba_userid) VALUES(NOW(), "modified",#
# ba_blogid, ba_userid) VALUES(NOW(), "deleted",#
#-----#
#-----+-----+
#          | Timing |
#-----+-----+
# NEW.ba_id, NEW.ba_userid) | AFTER  |
# NEW.ba_id, NEW.ba_userid) | AFTER  |
# OLD.ba_id, OLD.ba_userid) | BEFORE |
#-----+-----+
```

4.4. ba_blogcategory

Contains the categories relating to the tags.

*** Tables ***

```
mysql> CREATE TABLE ba_blogcategory (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_category VARCHAR(32) NOT NULL);
```

| Field | Type | Null | Key | Default |
|-------------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_category | varchar(32) | NO | | NULL |

Extra

auto_increment

4.5. ba_blogroll

Contains the feed URLs for the blog roll.

```
mysql> CREATE TABLE ba_blogroll (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_feed VARCHAR(128) NOT NULL);
```

| Field | Type | Null | Key | Default |
|---------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_feed | varchar(128) | NO | | NULL |

Extra

auto_increment

4.6. ba_comment

Contains all comments related to the blog entries.

*** Tables ***

```
mysql> CREATE TABLE ba_comment (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_userid INT UNSIGNED NOT NULL,
ba_datetime DATETIME NOT NULL,
ba_ip VARCHAR(48) NOT NULL,
ba_name VARCHAR(64) NOT NULL,
ba_mail VARCHAR(64) NOT NULL,
ba_text VARCHAR(2048) NOT NULL,
ba_comment VARCHAR(2048) NOT NULL,
ba_blogid INT UNSIGNED NOT NULL,
ba_state TINYINT UNSIGNED NOT NULL);
```

| Field | Type | Null | Key |
|-------------|---------------------|------|-----|
| ba_id | int(10) unsigned | NO | PRI |
| ba_userid | int(10) unsigned | NO | |
| ba_datetime | datetime | NO | |
| ba_ip | varchar(48) | NO | |
| ba_name | varchar(64) | NO | |
| ba_mail | varchar(64) | NO | |
| ba_text | varchar(2048) | NO | |
| ba_comment | varchar(2048) | NO | |
| ba_blogid | int(10) unsigned | NO | |
| ba_state | tinyint(3) unsigned | NO | |

| Default | Extra |
|---------|----------------|
| NULL | auto_increment |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |

Comments can have four states (similar to blog entries):

- CREATED
- EDITED
- APPROVAL

*** Tables ***

- PUBLISHED

Only published and checked comments will be shown on frontend.

4.7. ba_gallery

Contains the galleries, their description and an alias for URLs.

```
mysql> CREATE TABLE ba_gallery (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_alias VARCHAR(16) NOT NULL,  
ba_text VARCHAR(64) NOT NULL,  
ba_order VARCHAR(4) NOT NULL);
```

| Field | Type | Null | Key | Default |
|----------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_alias | varchar(16) | NO | | NULL |
| ba_text | varchar(64) | NO | | NULL |
| ba_order | varchar(4) | NO | | NULL |

| Extra |
|----------------|
| auto_increment |

4.8. ba_home

Start page with elements for images and paragraphs.

```
mysql> CREATE TABLE ba_home (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_element VARCHAR(16) NOT NULL,  
ba_css VARCHAR(32) NOT NULL,  
ba_value VARCHAR(1024) NOT NULL);
```


*** Tables ***

| Field | Type | Null | Key | Default |
|----------------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_element | varchar(16) | NO | | NULL |
| ba_css | varchar(32) | NO | | NULL |
| ba_value | varchar(1024) | NO | | NULL |
| Extra | | | | |
| auto_increment | | | | |

4.9. ba_languages

Lists the locales for the xml files in folder 'language'.

```
mysql> CREATE TABLE ba_languages (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_locale VARCHAR(8) NOT NULL,
ba_selected TINYINT UNSIGNED NOT NULL);
```

| Field | Type | Null | Key |
|-------------|---------------------|------|-----|
| ba_id | int(10) unsigned | NO | PRI |
| ba_locale | varchar(8) | NO | |
| ba_selected | tinyint(3) unsigned | NO | |
| Default | Extra | | |
| NULL | auto_increment | | |
| NULL | | | |
| NULL | | | |

```
mysql> INSERT INTO ba_languages (ba_locale, ba_selected)
VALUES ("de-DE", 1);
```

*** Tables ***

```
mysql> INSERT INTO ba_languages (ba_locale, ba_selected)
VALUES ("en-US", 0);
```

| ba_id | ba_locale | ba_selected |
|-------|-----------|-------------|
| 1 | de-DE | 1 |
| 2 | en-US | 0 |

Change value in column ba_selected by your needs, first with '1' is selected.

4.10. ba_options

Contains the options for blog and feed.

```
mysql> CREATE TABLE ba_options (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_name VARCHAR(32) NOT NULL,
ba_value TINYINT UNSIGNED NOT NULL);
```

| Field | Type | Null | Key | Default |
|----------|---------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_name | varchar(32) | NO | | NULL |
| ba_value | tinyint(3) unsigned | NO | | NULL |

Extra

| |
|----------------|
| auto_increment |
|----------------|

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES
("blog_entries_per_page", 20);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES
("blog_comments_per_page", 20);
```

*** Tables ***

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("feed_num_entries", 20);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("feed_use_summary", 0);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("blog_num_sentences_intro", 1);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("feed_num_sentences_summary", 3);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("blog_diary_mode", 1);
```

```
mysql> INSERT INTO ba_options (ba_name, ba_value) VALUES  
("footer_num_entries", 5);
```

| ba_id | ba_name | ba_value |
|-------|----------------------------|----------|
| 1 | blog_entries_per_page | 20 |
| 2 | blog_comments_per_page | 20 |
| 3 | feed_num_entries | 20 |
| 4 | feed_use_summary | 0 |
| 5 | blog_num_sentences_intro | 1 |
| 6 | feed_num_sentences_summary | 3 |
| 7 | blog_diary_mode | 1 |
| 8 | footer_num_entries | 5 |

Value in column feed_use_summary and blog_diary_mode are interpreted as boolean (1: true, 0: false).

The blog can be run in two modes: diary-mode without header / intro text and short date in one line or non-diary-mode with header, intro text and date / author in one extra line.

4.11. ba_options_str

Contains the options for blog and feed, string type.

*** Tables ***

```
mysql> CREATE TABLE ba_options_str (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_name VARCHAR(32) NOT NULL,  
ba_value VARCHAR(64) NOT NULL);
```

| Field | Type | Null | Key | Default |
|----------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_name | varchar(32) | NO | | NULL |
| ba_value | varchar(64) | NO | | NULL |

Extra

auto_increment

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("contact_mail", "user@example.org");
```

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("feed_id", "tag:example.org,2010:user");
```

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("feed_url", "http://www.example.org/blog/");
```

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("feed_title", "user atom feed");
```

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("feed_subtitle", "description");
```

```
mysql> INSERT INTO ba_options_str (ba_name, ba_value) VALUES  
("feed_author", "Jane Doe");
```

*** Tables ***

| ba_id | ba_name | ba_value |
|-------|---------------|------------------------------|
| 1 | contact_mail | user@example.org |
| 2 | feed_id | tag:example.org,2010:user |
| 3 | feed_url | http://www.example.org/blog/ |
| 4 | feed_title | user atom feed |
| 5 | feed_subtitle | description |
| 6 | feed_author | Jane Doe |

Feel free to change the string values in column `ba_value`.

4.12. ba_photos

Contains a list of all photos in folder 'jpeg', with description and related gallery. Photo id is also eight-char-filename without extension in folder 'jpeg'.

```
mysql> CREATE TABLE ba_photos (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_galleryid INT UNSIGNED NOT NULL,  
ba_photoid VARCHAR(8) NOT NULL,  
ba_text VARCHAR(64) NOT NULL,  
ba_hide TINYINT UNSIGNED NOT NULL);
```

*** Tables ***

| Field | Type | Null | Key |
|--------------|---------------------|------|-----|
| ba_id | int(10) unsigned | NO | PRI |
| ba_galleryid | int(10) unsigned | NO | |
| ba_photoid | varchar(8) | NO | |
| ba_text | varchar(64) | NO | |
| ba_hide | tinyint(3) unsigned | NO | |
| Default | Extra | | |
| NULL | auto_increment | | |
| NULL | | | |
| NULL | | | |
| NULL | | | |

4.13. ba_profile

Profile page with elements for images and paragraphs (see ba_home) and additional tables or tables with header.

```
mysql> CREATE TABLE ba_profile (
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
ba_element VARCHAR(16) NOT NULL,
ba_css VARCHAR(32) NOT NULL,
ba_value VARCHAR(1024) NOT NULL);
```

*** Tables ***

| Field | Type | Null | Key | Default |
|------------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_element | varchar(16) | NO | | NULL |
| ba_css | varchar(32) | NO | | NULL |
| ba_value | varchar(1024) | NO | | NULL |

Extra

auto_increment

4.14. ba_profile tables

Contains the HTML tables for ba_profile and related language code.

```
mysql> CREATE TABLE ba_profile_tables (  
ba_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
ba_table_name VARCHAR(32) NOT NULL,  
ba_row INT UNSIGNED NOT NULL,  
ba_col INT UNSIGNED NOT NULL,  
ba_language VARCHAR(2) NOT NULL,  
ba_value VARCHAR(256) NOT NULL);
```

*** Tables ***

| Field | Type | Null | Key | Default |
|----------------|------------------|------|-----|---------|
| ba_id | int(10) unsigned | NO | PRI | NULL |
| ba_table_name | varchar(32) | NO | | NULL |
| ba_row | int(10) unsigned | NO | | NULL |
| ba_col | int(10) unsigned | NO | | NULL |
| ba_language | varchar(2) | NO | | NULL |
| ba_value | varchar(256) | NO | | NULL |
| Extra | | | | |
| auto_increment | | | | |

4.15. backend

The core table, contains all users, their role, password and more. Password is encrypted with blowfish hash and random salt.

If two factor authentication is used, table backend contains the last entered code and the secret for calculating the code, see RFC 6238 TOTP: Time-Based One-Time Password Algorithm for more information. The secret can be scanned as a QR Code and used by a smartphone (for example 'Google Authenticator'). The secret is stored AES-encrypted in the table.

*** Tables ***

```
mysql> CREATE TABLE backend (
id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,
role TINYINT UNSIGNED NOT NULL,
user VARCHAR(32) NOT NULL,
password VARCHAR(64) NOT NULL,
email VARCHAR(64) NOT NULL,
full_name VARCHAR(64) NOT NULL,
locale VARCHAR(8) NOT NULL,
last_login DATETIME NOT NULL,
use_2fa TINYINT UNSIGNED NOT NULL,
last_code INT UNSIGNED NOT NULL,
base64_secret VARBINARY(64) NOT NULL);
```

| Field | Type | Null | Key |
|---------------|---------------------|------|-----|
| id | int(10) unsigned | NO | PRI |
| role | tinyint(3) unsigned | NO | |
| user | varchar(32) | NO | |
| password | varchar(64) | NO | |
| email | varchar(64) | NO | |
| full_name | varchar(64) | NO | |
| locale | varchar(8) | NO | |
| last_login | datetime | NO | |
| use_2fa | tinyint(3) unsigned | NO | |
| last_code | int(10) unsigned | NO | |
| base64_secret | varbinary(64) | NO | |

| Default | Extra |
|---------|----------------|
| NULL | auto_increment |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |
| NULL | |

Users can have one of four roles:

*** Tables ***

- NONE
- EDITOR
- MASTER
- ADMIN

Add an admin and a user for daily work with corresponding privileges.

Use PHP to get an initial password hash:
\$password_hash = password_hash("fancy_password",
PASSWORD_BCRYPT);
(of course ... choose another password string).

```
mysql> INSERT INTO backend (role, user, password, email,  
full_name, locale, use_2fa) VALUES (3, "admin",  
"$2y$10$[32]", "user@example.org", "Jane Doe", "de-DE", 0);
```

```
mysql> INSERT INTO backend (role, user, password, email,  
full_name, locale, use_2fa) VALUES (2, "user1",  
"$2y$10$[32]", "user@example.org", "Jane Doe", "de-DE", 0);
```

```
+-----+-----+-----+-----+-----+-----+
| id | role | user | password | email |
+-----+-----+-----+-----+-----+-----+
| 1 | 3 | admin | $2y$10$[32] | user@example.org |
| 2 | 2 | user1 | $2y$10$[32] | user@example.org |
+-----+-----+-----+-----+-----+-----+
| full_name | locale | last_login | use_2fa |
+-----+-----+-----+-----+-----+-----+
| Jane Doe | de-DE | 0000-00-00 00:00:00 | 0 |
| Jane Doe | de-DE | 0000-00-00 00:00:00 | 0 |
+-----+-----+-----+-----+-----+-----+
```

Again, feel free to change the string values.

After first login in backend, go to password (upper right corner), check use_2fa, request secret, scan QR Code with your favorite 2FA smartphone app.

5. Contact

For further questions or contribution send a mail to: Andrea Kleinschmidt <ak81@oscilloworld.de>

*** Credits ***

6. Credits

The tutorial on the web, which inspired me (or where I have stolen everything) to implement the MVC architecture pattern:

<http://tutorials.lemme.at/mvc-mit-php/>

7. Appendix

Backend left side HTML Menu with links to the modules and their necessary role:

NONE:

- |__backend

EDITOR:

- |__base
 - | |__base
 - |__home
 - | |__home
 - | |__elements
 - |__profile
 - | |__profile
 - | |__tables
 - | |__elements
 - |__photos
 - | |__gallery
 - | |__photos
 - |__blog
 - | |__blog (new)
 - | |__blog (list)
 - | |__blogroll
 - | |__categories
 - | |__options

MASTER:

- |__comment
 - | |__comment (new)
 - | |__comment (list)
- |__upload
 - | |__upload
 - | |__media
- |__languages

ADMIN:

- |__admin
 - | |__admin
 - | |__new user

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