Technical design - PHP

Directory classes

Description: Directory containing PHP classes

_includes.php

Description: Includes all other includes and sets *$filesenderbase* to the location of the current file.

AuthSaml.php

Description: Contains the AuthSaml class

Class AuthSaml

Description: Handles the SAML authentication

methods:

- public:
  - **getInstance()** returns the singleton instance
  - **authIsAdmin()** checks if a user is SAML authenticated and is administrator. returns true/false used by flex to display admin features
  - **sAuth()** returns SAML authenticated user information as json array
  - **logonURL()** returns logon URL from SAML and returns string for flex
  - **logoffURL()** returns logon OFF URL from SAML and returns string for flex
  - **isAuth()** checks SAML for authenticated user: returns true/false

AuthVoucher.php

Description:: Contains the AuthVoucher class

Class AuthVoucher

Description: voucher related functions

methods:

- public:
  - **getInstance()** returns the singleton instance
  - **aVoucher()** - check if a voucher exists and returns true/false
  - **validVoucher()** - check if a voucher exists and is available and returns found/notfound/invalid/none (for flex application)
  - **getVoucher()** - returns voucher as json array

DB.php

Description: functions for database connection. Uses config.php settings for database access.

Class DbException

extends: extends Exception

Description: Exception raised in case of database problem

Class DbConnectException

extends: DbException

Description: Exception raised in case of connect problem

Class DB

Description: Represents database connection

methods:

- public
    - **getInstance()** returns the singleton instance
    - **connect()** connect to the database. returns reference to postgresql connection. Raises DBConnectException in case of connect problem
    - **fquery()** executes query and arguments (???)
    - **query(*$query*)** check connection and call **DoQuery** with *$query*
    - **buildQuery()** Combine supplied arguments in one query
    - **doQuery($handle, $query)** executes the SQL query in *$query*

properties:

- *$connection* reference to postgresql connection

DB_Input_Checks.php

Description: Contains class DB_Input_checks and some functions

- **ip2long6(*$ipv6*)** converts IPv6 address to a long number
- **long2ip6(*$ipv6long*)** converts long number to IPv6 address
- **checkdateformat(*$date, $dateformat*)** returns date, TODO: FUNCTION NOT FINISHED

Class DB_Input_Checks

Description: Takes care of the input checks required in sql queries. Each check return the value or the report the error in errorReporting. All the Vars will go through a mysqlEscape function, in this function different ways of general string filtering can be used.

methods:

- public:
  - **getInstance()** returns the singleton instance
  - **checkEmail(*$email*)** check if an email address if valid
  - **checkURL(*$url*)** check if a URL is valid
  - **checkIp(*$ip*)** returns sanitized IPv4 address
  - **checkIp6(*$ip*)** returns sanitized IPv6 address
  - **errorReport(*$errorMessage*)** empty functions used for error reporting, TODO: FUNCTION NOT FINISHED

EN_AU.php

Description: Contains class EN_AU

Class EN_AU

Description: EN_AU language file for flex application. Contains a mapping from strings used internally in the code to Australian English.

methods:

- public:
  - **language()** returns the *$lang* array

properties:

- *$lang* dictionary with mapping from string code used in source and real language

Functions.php

Description: contains the class *Functions* and some functions

- **formatBytes(*$bytes, $precision=2*)** Format bytes into readbable text format
- **getGUID()** Create Unique ID for vouchers
- **sanitizeFilename(*$filename*)** Replace illegal chars with _ character in supplied filenames
- **ensureSaneFileUid(*$fileuid*)** Error if fileUid doesn't look sane

Class Functions

Description:

methods:

- public:
  - **construct()** Constructor
  - **getInstance()** returns the singleton instance
  - **getStats()** Return Basic Database Statistics e.g. Up xx Gb (files xx) | Down xx Gb (files xx)

- **getSplash()** Get Splash Screen text for all users
- **getConfig()** Retrun Specific config fields required by flex as JSON array
- **getVouchers()** Get Voucher for a specified user based on eduPersonTargetedID
- **getUserFiles()** Get Files for a specified user based on eduPersonTargetedID
- **adminLogs()** Return logs if users is admin
- **adminFiles()** Return Files if users is admin
- **getFile(*$dataitem*)** Return file information based on filervoucheruid
- **getVoucher(_$vid)** Return voucher information based on filervoucheruid
- **downloadedFile()** Email and log when a file is downloaded
- **insertFile()** Insert new file or voucher
- **updateFile()** Update file or voucher
- **deleteVoucher(*$fileid*)** Delete a voucher specified by *$fileid*
- **closeVoucher(*$fileid*)** Close a voucher specified by *$fileid*
- **deleteFile(*$fileid*)** Delete a voucher specified by *$fileid*
- **getFileSize(*$filename*)** return file size of file specified by *$filename*
- **driveSpace()** Returns the total number of bytes as a float or FALSE on failure
- **moveFile()** move file from tmp directory to live directory and rename with Unique ID

properties:

- private:
  - *$saveLog* reference the Log instance
  - *$db* reference the DB instance
  - *$CFG* reference the Config instance
  - *$sendmail* reference to the Mail instance
  - *$authsaml* reference to the AuthSaml instance
  - *$authvoucher* reference to the AuthVoucher instance
  - *$returnFields* These fields are returned without fileUID to stop unauthorized users accessing the fileUID

Log.php

Description: Contains the Class Log

Class Log

Description: Logging functions, used for logging to a log storage

methods:

- public:
  - **getInstance()** Returns the singleton instance
  - **saveLog(*$dataitem, $logType, $message*)** Save Log Data
  - **logProcess(*$client, $message*)** logfile for individual client specific logging. calls to this function are form glex/flash if client specific logging is on

Mail.php

Description: Contains the Class Mail

Class Mail

Description: Mail functions, used for sending mail

methods:

- public:

  - **getInstance()** Returns the singleton instance
  - **sendemail(*$mailobject*, *$template*)** Send mail
  - **sendemailAdmin(*$message*)** Send admin mail messages

Directory includes

EnsureHTTPS.php

Description: Destroy session when used HTTP (not HTTPS) and ForceSSL is set in config

ErrorHandler.php

Description: Error handling functions

functions:

- **customException(*$exception*)** Custom exception
- **customError(*$errno*, *$errstr*, *$errfile*, *$errline*)** Custom error
- **logEntry(*$message*)** general log function for flex logging

UTF8.php

Description: UTF-8/International Character handling related functions

functions:

- **detectLatin1(*$string*)** Simple check for ISO-8859-1
- **detectUTF8(*$string*)** Simple check for UTF-8
- **detect_char_encoding(*$string*)** detect the required charset MIME encoding for $string, only distinguishes between US-ASCII, ISO-8859-1 and UTF-8
- **mime_qp_encode_header_value(*$string,$charsetin,$charsetout,$crlf*)** QP header encoding using iconv_mime_encode
- **utf8tohtml(*$utf8*, *$encodeTags*)** converts a UTF8-string into HTML entities

Directory config

config.php

Description: Contains the Class Config and let_to_num function

functions:

- let_to_num($v) - transforms the php.ini notation for numbers (like '2M') to an integer (2*1024*1024 in this case)

Class Config

Description: Empty class containing the loadConfig method

methods:

- public:
  - **getInstance()** Returns the singleton instance
  - **loadConfig()** return dictionary with all configuration variables

Directory cron

cron.php

Description: This script should be called by the cron daemon on a regular interval to remove files that have expired and close the expired files in the database

functions:

- **cleanUp()** Clean up missing file, removes out of date files and vouchers. return true if successful, false in case of error
- **logProcess($client, $message)** ??

Directory www

about.php

Description: Displays a custom About page

createxls.php

Description: return payload of htmltable POST variable into a excel document

fs_gears_upload.php

Description: Upload using gears. Data is sent in chunks from google gears and appended to the file in the temporary folder

fs_main.php

Description: Flex calls this for all requests except the actual file uploading.

*$POST['call']_* defines the functions trigger from this call flex uses HTTPService calls to talk to php and returns results as text or json text e.g. <mx:HTTPService id="init_main" url="../fs_main.php{URLvid}" useProxy="false" method="POST" resultFormat="text" result="resultInit(event)" fault="resultError(event)"/>

TODO: expand

fs_uploadit.php

Description: Upload file from flex application and move into site_filestore folder. returns string: moveOk, moveError,invalidAuth back to flex

help.php

Description: Displays custom help page

index.php

Description: Entry page, checking for flash, loads images and flex app.

invalidvoucher.php

Description: Displays invalid voucher page

displayimage.php

Description: Will call function **displayimage()** (inside)

Functions:

- **displayimage(*$customimage, $defaultimage*)** will read and print the contents of *$customimage* if it exists, otherwise *$defaultimage*

download.php

Description: download using PHP from a non web accessible folder. File is specified by a voucher ID (VID).

logout.php

Description: Displays a logout html page. Doesn't do the logout itself.

vouchererror.php

Description: Displays a invalid voucher page