Folder: Admin

Class	Requires	Function
Questiondetails.php	Dbutils.php	Get details of questions from the database and display them. This includes displaying possible answers, both correct and incorrect
Questionlist.php	Dbultils.php	Displays list of questions. It calls questiondetails.php to display data
Remove_image.php	Dbutils.php	Deletes an image from the questions_images database

Folder: Classes

Class	Requires…	Function	
Dbutils.php	None	Class for setting up databases	
		__construct	Takes in database username, password, and name arguments. Class constructor to create a new database connection object
		closeConnection	Close the mysql connection
		escapeMySqlString	Takes special characters arguments. Escapes the pecial characters used in the mySQL statement
		getDatasetWithParams	Takes sql select query, data types, and parameters arguments. Creates a dataset based on an SQL Select query and a set of parameters for the WHERE clause. This method only works with SELECT queries
		getDataset	Takes a SQL SELECT query argument. Creates a dataset on an SQL SLECT query where the WHERE clause is concatenated
		executeQuery	Takes SQL SELECT query, types, and parameters arguments. Executes an INSERT, UPDATE, DELETE query with a set of parameters for the WHERE clause
		getRecordsetAsJson	Takes SQL Select query, types, and parameters arguments. Creates a JSON object form data returned by an SQL Select query and a set of parameters for the WHERE clause. This only works with SELECT queries

HtmlUtilities	None	Is any of this actually used?	
Image.php	None	Class for image object	
		__construct	Constructs image object
Levelsecurity.php	getaccess.php	Checks to make sure the user isn't jumping levels	
Question.php	Image.php	Class for question object	
		__construct	Contructor function for question object. Splits depending whether or not user is in practice mode.
		logUsedQuestion	Inserts a question that has been used into used_question_log database
		loadDistractors	Load distractor images for the questions
		toJSON	Converts image List to Json
Quiz.php (actually for Quiz Question)	None	Class for Quiz Question object	
		__construct	Takes database username, password, and name arguments. Constructor to create a new database connection object
		closeConnection()	Close SQL database connection
		escapeMYSqlString	Takes special character arguments. Creates an escape string for the sql database
		getDatasetWithParams	Takes SQL Select query, types, and parameters arguments. Creates a dataset based on a select query and a set of paramters for the WHERE clause. This method only works with SELECT queries
		getDataset	Take SQL SELECT query parameters. Creates a database on an SQL SELECT query where the WHERE clause is concatenated
		executeQuery	Takes SQL SELECT query, types, and parameters aruguments. Executes an INSERT< UPDATE< DELETE query with a set of parameters for the WHERE clause

		getRecordsetAsJson	Takes SQL SELECT query, types, and parameters arguments. Creates a JSON object form data returned by an SQL SELECT query and a set of paramters for the WHERE clause. This method only works with SELECT queries
Quizquestion.php	None	Pretty sure this was abandoned	
security.php	None	Checks if user id in the session is blank or "invalid". Redirects to authfailed.php	
stringutils.php	None	Replaces certain characters in strings	
		cleanMySqlInsert	Takes sql String argument, Replaces characters that present potential danger for SQL Injections or can break SQL syntax

Folder: Rest

Class	Requires…	Function
getaccess.php	Dbutils.php	Checks if user ID is set in the session. Set accordingly. Files an SQL SELECT query for everything from page access database where the ID matches the session ID.
getDistractors.php	Dbutils.php	Gets distractor images for questions. Selects question ID, diagnosis name, hint, image ID, image folder, and image name from the distractor and questions databases where IDs match. Randomizes them, encodes in json, and displays the data.
getPracticeQuestions.php	Dbutils.php	Retrieves practices questions. Selects question ID, image ID, category name, diagnosis name, hint, number of images, image folder, and image name. from categories and questions databases where IDs match. Loops number of times as the "limit" in the session
getscore.php	Dbutils.php	Sets the IDs from the session data. IF the user ID is "TOPFIVE", retrieves the top five score, encodes them into JSON and displays them.

		Otherwise, select the question ID, image ID, if there is a bonus, level ID, attempt ID, score received, date and time started, and date and time ended. Gets data from score database where IDs match. Then selects question ID, score date, score time, level ID, and attempt ID. Gets data from questioncomplete database where IDs match. Displays score and question data.
getuserlist.php	Dbutils.php	Gets ID from session. Select name from drupal_users where ID matches session ID. Sets database name, username, and password. Creates a new DbUtilities object from previous data, turns it into an array and encodes to Json
Leaderboard_ws.php	Dbutils.php	Retrieve the Leader board scores Selects user ID, level ID, and max level score From the dentalgame score log Where level is complete Group by user and level id Order by max level score Limit to 3 queries Encode to JSON Select user ID, level ID, and sum of Max Overall score From dental game score log Where the level is complete Group by ID Order by the max overall score Limit to 5 results Encode to Json
levelsummary.php	Dbutils.php	Displays the level summary, including score and answers Get the game attempt, level, and user IDs from the session data Select Max level attempt number From the score log Where the user and attempt ID matches

		Select the level attempt number, if the level is complete, final level score, number of questions answered, number of questions correct, and number of questions incorrect From Scorelog Where attempt, user, and level IDs match Save as score and encode in JSON Select question ID, image ID, diagnosis name, image Folder, image Name, and whether it is correct Fromanswer log, questions_images, questions, and images databases Where image, question, attempt, user, and level IDs match Save as answers Display scores and answers
Logquizanswer.php	Dbutils.php	Set user ID, question ID, choice ID, and if item is correct from session data Insert data above into quizanswerlog database
Question_ws.php	Dbutils.php	Gets question and distractor info from databases and display them If the level ID is set from the session Select question ID, diagnosis name, hint, image ID, image folder, and image name From questions and questions_levels databases Where IDs match Randomize Encode to JSon and save as questions Select question ID, diagnosis name, forQuestion ID, image ID, image folder, and image name From distractors and questions databases Where IDs match Randomize Encode to Json and save as distractors Display questions and distractors

Utf8ize	IF argument is an array, for each item, use recursion to call itself for each string If string, encode it into utf8

Question_ws_obj.php	Dbutils.php Question.php	Create new question object and encode in JSON. Question object depends on user's current level Get game attempt and level IDs from session Retrieve practice categories if any Display questions differently depending on level
Quizquestion_ws.php	Dbutils.php	Creates a QuizQuestion and QuizQuestionChoice object Selects question ID question stem, choice Id, choice text, and if item is correct From quizquestions and quizquestionchoices databases where IDs match and items are active Order by question ID Save as collection list Iterate through collection list and put questions in collection list into new array list called question list Also construct new questions based on data from sql query
Quizscorecard_ws.php	Dbutils.php	Displays user's scorecard Select date answered, if correct, and count From quizanswerlog Where IDs match Group by Date answered and if correct Save as collectionlist, encode in json and display
Resultstojson.php	Dbutils.php	Convert entire sql database to JSON? (Actually not sure if this works)
Scorecard_ws.php	Dbutils.php	Display user's scorecard (not sure how this differentiates from quizscorecard_ws.php) Select level ID, log time and date, level attempt, final level score, number of questions answered, number correct, and number incorrect From the scorelog Where user IDs match and the level is complete Order by log date time descending and level ID ascending Convert to json and display
Session.php	None	Set name and value session data and display (not sure if this is used)
Updateaccess.php	None	Insert new access data in page access database Depends if session data is already set
Updateanswerlog.php	None	Update the answer log database

		Retrieve session data and display
		Then insert into answer log database with SQL
Updatescore.php	Dbutils.php	Update the score database
		Retrieve session data and display
		Then insert into score database with SQL
Updatescorelog.php	Dbutils.php	Update the scorelog database
		Retrieve session data
		Insert data into score log database with SQL

Old Documentation

Class	What does it do?		
Security.php	Checks session user ID and fail authentication if needed. Present on most, if not all pages		
Levelsecurity.php	Checks if user is not jumping levels		
Getaccess.php	Sets $userID and $attemptID from the $_SESSION, gets page access with sql, gets dataset		
Dbutils.php (Not used???)	_construct	Constructs a database with password, username, etc. Standard sql database creation	
	Closeconnection()	Close database connection	
	EscapeMySqlString	Escape string	
	getDatasetWithParams	Gets specific SQL dataset with parameters	
	getDataset	Get specific dataset (no parameters)	
	executeQuery	Executes an SQL query	
	getRecordsetAsJson	Creates JSON object from data returned by an SQL select query	
Question.php	__construct	Sets $attemptID to the passed in variable and creates a new DbUtilities variable	
	If not category specified	Pulls questions based on levels and randomly orders them	
	If category specified	Indicates practice round, gets questions from specific category	
	logUsedQuestion	Indicates where specific questions have been used	
	loadDistractors	Picks out wrong answers for the question and randomizes them	
	Other functions	Simple sets global variables	
htmlUtilities.php (Not used???)	selectMultiControlFromDb		Creates a new DbUtilities class, iterates through the items in the dataset and displays them on the HTML page
	selectMultiControlFromNumberList		Same as previous, but parameters are number of questions
	selectControlFromArray		Displays data from a single array
	displaySelectedValList		Lists items from a dateset

		displayMonthSelectList	Displays the month and current time in the HTML page
Image.php		__contruct	Creates an image class item
		Other functions	Just constructor functions
Quiz.php		__construct	Creates a new database connection object
		closeConnection	Close database connection
		escapeMySqlString	Creates an escape string
		getDatasetWithParams	Gets a specific sql data set with parameters
		getDataset	Creates a dataset based on an SQL SELECT query where the WHERE clause is concatenated (No Parameters)
		executeQuery	Executes an INSERT, UPDATE, DELETE, query with a set of parameters for the where clause
		getRecordsetAsJson	Creates a JSON object from data returned by an SQL SELECT query and a set of parameters for the WHERE clause
quizQuestion	Just creates a quizquestion object with id and stem variables		
stringUltilities		cleanMySqlInsert	Fixes strings for sql inserts, such as double spaces for one space
Questiondetails.php	Gets list of questions from dbUtilities and displays them. Checks which answers are correct and incorrect for each question		
Questionlist	Displays list of question categories		
Remove_image.php	Removes an image from the database		
Dental.js		currentDateTime	Gets the current data and time
		updateAccess	Gets data to update user access
		updateAnswerLog	gathers the userId, selectedImageID, and if the question was answered correctly or not and sends all of this information to the updatescore.php file to be input into the database
		updateScoreLog	Updates the score log
		converDAte	Converts a passed in date and converts it to a javascript date object
		finDifference	Records time

		getScoreData	takes in the attempts, userID, and level ID It proceeds to display the number of correct answers per level and the number of attempts you have tried. If the number of correct attempts on any individual level meets a certain amount designated by that level the user has won that level
		showImagePreview	Allows a user to zoom in on a picture
		setSession	Sets a session for a user
		getFileName	Gets a url from the document
		hidePLay	Hides the play link if user is engaged within a level of the game
		getTopGive	Get top five score for leaderboard

		getQuestion	retrieves a single question from the JSON array returned by the web service
			and renders associated information on the screen, including:
			   1. question text,
			   2. hint (if there is a hint associated with the question)
			   3. associated image
			   4. distractor images
			This function also sets properties and functionalities of image select buttons and image Magnifiers

		highlightCorrectIncorrect	Takes a question parameter and displays if an answer was correct or incorrect
		showHint	Shows hint in html page
		showAnswerConfirm	Displays a jQueryUI modal popup to confirm whether an answer is correct or incorrect
		ShowMessage	Displays a certain message in html
		updateScoreBoard	Updates values displays in the scoreboard

		Shuffle	Shuffles values in an array passed an argument
		updateTimeBonus	Adjusts time score
		getImageFromControlID	a hack to deal with scope and lifecycle of jQuery objects and event handlers. All objects generated by this function have the same pattern for IDs - the type of object followed by underscore (_) followed by the ID of the image that the object is connected to. - Image: img_xxxxxxxxxxxxxxxxxxxxxx - Magnifying glass: mag_xxxxxxxxxxxxxxxxxxxxxx - Select button: sel_xxxxxxxxxxxxxxxxxxxxxx In order to get the associated image, we split the ID of linked object into an array - the second element of that array will always be the image ID
		getSelectedImageData	This function is a hack to deal with scope and lifecycle of jQuery objects and event handlers. In order to get the associated image, we split the ID of select button (HTML button used to select an image) into an array - the second element of that array will always be the image ID. This function retuns an image object with all of its associated properties by matching the button ID to an ID of one of the images displayed on the screen
		getUrlParameter	Gets the url of the page
		countRedirect	loads next question

Dental_04_21_2015.js	I don't think this is used anymore	
Dental_old.js	I don't think this is used anymore	
jsonUtils	getJSON	Retrieves a JSON string returned by a web service located at a specified URL. Utilizes jQuery to make an Ajax call to a web service or a script that returns a JSON string
tableBuilder.js	runQuery	Retrieves a JSON string based on an SQL query. Utilizes jQuery to rest/resultstojson.php - a PHP script that generates a JSON string based on an SQL query
	buildResultsTable	Builds a generic HTML table based on a JSON string.
	runUserQuery	Empties target HTML div tag and calls runQuery function
	clearUserQuery	Clears/restarts a query attempt
	getProblemTables	Generates HTML tables based on SQL query results. These tables are 'question' tables - they display data students need to build a query/report. Right now the queries are hardcoded - we'll need pull this data from a database in the long run
	getPuzzleTables	Not finished? Does not seem to be relevant to pharmacy quiz
Reportutils.py	pivotFromQuery	Pivots data from query
	spreadsheetFromtQuery	Writes query results to a spreadsheet
sqlUtils.py	getConnection	Gets an SQL connection
	tableToDictionary	Converts an SQL database to a dictionary

	queryToDataset	Converts an sql query to a dataset	
	Query to list	Converts an sql query to a list object	
	CleansqlString	Fixes an sql query string	
	execMysqlQuery	Executes an sql query	
	Record exists	Checks if a record exists in an sql database	
stringUtils.py	stringToDate	Converts a string to a date object	
	computeMD5hash	Computs an md5 hash	
	yearFromDateString	Gets a year from a date string	
	getJsonMapping	Gets the json from a year string	
	convertDatetoMySQL	Converts a date to a mysql string	
	convertDAteTimetoMySQL	Converts a date time object to an sql date object	
	stripNotNumeric	Removes non number characters	
	prefixZeroes	Adds a 0 to a prefix	

Quiz_import.py	Takes questions and inserts one correct answer and three incorrect answers into it
getDistractors.php	Gets distractor images for a question
getPracticeQuestions.php	Retrieves questions for practice mode
Getaccess.php	Setts user id and game attempt to the session
Getscore.php	Gets top 5 scores or retrieves a score from a userID
Getuserlist.php	Gets a list of users and encodes them into json
Leaderboard_ws.php	Displays a leaderboard of the scores
Levelsummary.php	Displays a summary of the user's results on a level
Logquizanswer.php	Logs the user's answer to a question
Question_ws.php	Gets a list of questions from a database
Question_ws_obj.php	Adjusts questions based on level
Quizquestion_ws.php	Creates quizquestions and question choice obtions and adds them to a list
Quizscorecard_ws.php	Keeps score for user
Resultstojson.php	Converts a data array to json
Scorecard_ws.php	Creates a score card containing the number of questions answered, correctly and incorrectly
Setsession.php	Sets the name of a user for a session
Updateaccess.php	Updates a the acess permissions for a user
Updateanswerlog.php	Updates the answer log with a user's attempt at a level
Updatescore.php	Updates a user's score
Updatescorelog.php	Updates a score upon completion of a level
Auth.php	Sets up a new DbUtilities object, and sets a session for the user
Authfailed.php	Page to show authentication failed

Caughtcheating.php	Page to indicate that user was caught cheating	
Completedlevelsummary.php	Displays the results of the user's attempt at the level	
	setupTimerBar()	Set up an html element to displat time
	updateTimerBar()	Updates the information on the timer bar
Game-level-example.php	Displays an example of a level	
	updateScoreData	Sets score data object to user's information
Gameattempt.php	Sets the start of the quiz	
Header.php	Sets the top of the page	
Homepage.php	Displays homepage of quiz	
Leaderboard.php	Displays the leaderboard	
Level1.php	Sets the first level	
	initQuestion	Initializes question
	selectDxImage	Activates when user selects an answer, indicates if it is right or wrong
Level1a.php	Determines if selecte image is correct or not. If it is orrecti, it sends the info to pdate score as true and bring up new question, similar if false	
	getScore	Retrieves score
	hintPointDeduction	Deduces points from base score if player used a hint
Level1tutorial.php	Displays tutorial for level 1	
Level2.hp	Sets the second level	
	initQuestion	Initializes question
	selectDximage	Activates when user selects an answer, indicates if it is right or wrong
	submitLevel2Answers	Checks answer to question and increments questions completed
	processAnswerChoices	Checks number of answers correct
	getNumberAvailableCorrect	Gets number of available questions correct
Level2a.php	Determines if selected image is correct or not. If it is correct, it sends the info to update score as true and bring up new question, similar if false	
	getScore	Retrieves score
Level2tutorial.php	Displays tutorial for level2	
Level3.php	Sets the third level	
	initQuestion()	Initialize questions
	loadLevel3Questions	Sets images and question items

	getImageDataFromSelection	Displays image object	
	randomizeSelectableTerms	Randomizes the selectable item choices	
	submitLEvel3Answers	Submits all of the answers for the user	
Level3a.php	saveSelectedPairs()	Saves the matches to be scored	
	selectDiagnosisMAtch	Function to store the diagnosis selection	
	SelectImageMatch	Function to store the image selection	
	calculateScore	Calculates the user's score	
	getScore	Retrieves score	
Level3tutorial.php	Displays tutorial for level 3		
Logout.php	Logs out of session		
Practice.php	Displays practice options		
practiceQuestion.php	Displays a practice question		
Practicemenu.php	Displays practice menu		
Quiz.php	loadQuestion	Loads a question for level	
	submitQuestion	Submits question for answering	
	getCorrectQuestionChoice	Displays correct answer	
Quizscorecard.php	Displays score card of user		
Scorecard.php	Sets the score card of the user		
Tutorial.php	Shows tutorial of the quiz		
Win.php	Displays win page of quiz		