

Folder: Admin

<i>Class</i>	<i>Requires</i>	<i>Function</i>
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	Dbutils.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

<i>Class</i>	<i>Requires...</i>	<i>Function</i>	
Dbutils.php	None	Class for setting up databases	
		<i>__construct</i>	Takes in database username, password, and name arguments. Class constructor to create a new database connection object
		<i>closeConnection</i>	Close the mysql connection
		<i>escapeMySqlString</i>	Takes special characters arguments. Escapes the special characters used in the MySQL statement
		<i>getDatasetWithParams</i>	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
		<i>getDataset</i>	Takes a SQL SELECT query argument. Creates a dataset on an SQL SLECT query where the WHERE clause is concatenated
		<i>executeQuery</i>	Takes SQL SELECT query, types, and parameters arguments. Executes an INSERT, UPDATE, DELETE query with a set of parameters for the WHERE clause
		<i>getRecordsetAsJson</i>	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	
		<code>__construct</code>	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	
		<code>__construct</code>	Constructor function for question object. Splits depending whether or not user is in practice mode.
		<code>logUsedQuestion</code>	Inserts a question that has been used into used_question_log database
		<code>loadDistractors</code>	Load distractor images for the questions
		<code>toJSON</code>	Converts image List to Json
Quiz.php (actually for Quiz Question)	None	Class for Quiz Question object	
		<code>__construct</code>	Takes database username, password, and name arguments. Constructor to create a new database connection object
		<code>closeConnection()</code>	Close SQL database connection
		<code>escapeMySQLString</code>	Takes special character arguments. Creates an escape string for the sql database
		<code>getDatasetWithParams</code>	Takes SQL Select query, types, and parameters arguments. Creates a dataset based on a select query and a set of parameters for the WHERE clause. This method only works with SELECT queries
		<code>getDataset</code>	Take SQL SELECT query parameters. Creates a database on an SQL SELECT query where the WHERE clause is concatenated
		<code>executeQuery</code>	Takes SQL SELECT query, types, and parameters arguments. Executes an INSERT< UPDATE< DELETE query with a set of parameters for the WHERE clause

		<i>getRecordsetAsJson</i>	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	
		<i>cleanMySQLInsert</i>	Takes sql String argument, Replaces characters that present potential danger for SQL Injections or can break SQL syntax

Folder: Rest

<u>Class</u>	<u>Requires...</u>	<u>Function</u>
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.

		<p>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.</p> <p>Then selects question ID, score date, score time, level ID, and attempt ID. Gets data from questioncomplete database where IDs match.</p> <p>Displays score and question data.</p>
getuserlist.php	Dbutils.php	<p>Gets ID from session.</p> <p>Select name from drupal_users where ID matches session ID.</p> <p>Sets database name, username, and password. Creates a new DbUtilities object from previous data, turns it into an array and encodes to Json</p>
Leaderboard_ws.php	Dbutils.php	<p>Retrieve the Leader board scores</p> <p>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</p> <p>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</p>
levelsummary.php	Dbutils.php	<p>Displays the level summary, including score and answers</p> <p>Get the game attempt, level, and user IDs from the session data</p> <p>Select Max level attempt number From the score log Where the user and attempt ID matches</p>

		<p>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</p> <p>Select question ID, image ID, diagnosis name, image Folder, image Name, and whether it is correct From answer log, questions_images, questions, and images databases Where image, question, attempt, user, and level IDs match Save as answers</p> <p>Display scores and answers</p>		
Logquizanswer.php	Dbutils.php	<p>Set user ID, question ID, choice ID, and if item is correct from session data</p> <p>Insert data above into quizanswerlog database</p>		
Question_ws.php	Dbutils.php	<p>Gets question and distractor info from databases and display them</p> <p>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</p> <p>Encode to JSON and save as questions</p> <p>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</p> <p>Display questions and distractors</p> <table><tr><td>Utf8ize</td><td><p>IF argument is an array, for each item, use recursion to call itself for each string</p><p>If string, encode it into utf8</p></td></tr></table>	Utf8ize	<p>IF argument is an array, for each item, use recursion to call itself for each string</p> <p>If string, encode it into utf8</p>
Utf8ize	<p>IF argument is an array, for each item, use recursion to call itself for each string</p> <p>If string, encode it into utf8</p>			

Question_ws_obj.php	Dbutils.php Question.php	<p>Create new question object and encode in JSON. Question object depends on user's current level</p> <p>Get game attempt and level IDs from session Retrieve practice categories if any</p> <p>Display questions differently depending on level</p>
Quizquestion_ws.php	Dbutils.php	<p>Creates a QuizQuestion and QuizQuestionChoice object</p> <p>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</p> <p>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</p>
Quizscorecard_ws.php	Dbutils.php	<p>Displays user's scorecard</p> <p>Select date answered, if correct, and count From quizanswerlog Where IDs match Group by Date answered and if correct</p> <p>Save as collectionlist, encode in json and display</p>
Resultstojson.php	Dbutils.php	Convert entire sql database to JSON? (Actually not sure if this works)
Scorecard_ws.php	Dbutils.php	<p>Display user's scorecard (not sure how this differentiates from quizscorecard_ws.php)</p> <p>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</p>
Session.php	None	Set name and value session data and display (not sure if this is used)
Updateaccess.php	None	<p>Insert new access data in page access database Depends if session data is already set</p>
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

Folder: Main

<u>Class</u>	<u>Requires</u>	<u>Functions</u>
Auth.php	Dbutils.php	Sets default database name, username, and password. Authenticate user Retrieve list of users from drupal_users Where ID matches Drupal_users has one entry already, set it to session Otherwise, authentication failed
Authfailed.php	Header.php Footer.php	Page for failed authentication
Caught_cheating.php	Security.php Dbutils.php Question.php Header.php Footer.php	Page to tell user they were cheating
Completedlevelsummary.php	Security.php Header.php levelSummary.php	Display completed level summary Once document has been loaded into browser Set all session info Iterate through all answers and say whether it was answered correctly or not If level is completed, redirect to next level Otherwise, offer to repeat level

		<i>setupTimerBar</i>	Set up timer for the level
		<i>updateTimerBar</i>	Change timer appearance upon completion of level (unsure if actually used)
Footer.php	None	Footer for page	
Gameattempt.php	Security.php Dbutils.php Updateaccess.php	If level ID is already set, redirect to incorrect_level.php Otherwise, send user to level 1 tutorial	
Game-level-example.php	Dbutils.php Question.php	Show an example of the game level When document is loaded, set button to each image and say whether each answer is right or wrong <div> <div><i>updateScoreData</i></div> <div> Takes user ID, selected image id, and if image is correct arguments Set score data variables from arguments, JSON and send score to updatescore.php </div> </div>	
Header.php	None	Header to be displayed on top of most pages	
Homepage.php	Header.php	Display homepage for game. Includes links to each mode	
Leaderboard.php	Header.php Footer.php Security.php Dbutils.php Question.php	Display the leaderboard for the game	
Level1.php	Security.php Header.php Footer.php Question_ws_obj.php	Page for level 1 of game <div> <div><i>initQuestion</i></div> <div>Get question from question_ws_obj.php and initialize</div> <div><i>selectDxImage</i></div> <div>Take button object argument. Check if user's answer is correct or not.</div> </div>	

			<div>If user has reached 5 correct, level is passed</div> <div>If user missed 2, game over</div>										
Level1a.php	Security.php Dbutils.php Levelsecurity.php Question.php Header.php Footer.php	<div>Determines if the selected image is correct or not. If it is correct, send info to update score as true and bring up new question. IF false, send info to updatescore data and upload new question</div> <table><tr><td><i>getScore</i></td><td>Take amount argument. Calculate score</td></tr><tr><td><i>hintPointDeduction</i></td><td>Formula for deducting points for hints</td></tr></table>	<i>getScore</i>	Take amount argument. Calculate score	<i>hintPointDeduction</i>	Formula for deducting points for hints							
<i>getScore</i>	Take amount argument. Calculate score												
<i>hintPointDeduction</i>	Formula for deducting points for hints												
Level1tutorial.php	Security.php Debutils.php Question.php Header.php Footer.php	Display the tutorial for level 1											
Level2.php	Header.php Footer.php	<div>Page for level 2 of the game</div> <table><tr><td><i>initQuestion</i></td><td>Initialize question</td></tr><tr><td><i>selectDxImage</i></td><td>Determine if user's answer was right</td></tr><tr><td><i>SubmitLevel2answers</i></td><td>Submit answers for level 2</td></tr><tr><td><i>processAnswersChoices</i></td><td>Increase score if answer was right. If user wins or loses the level, send them to the correct page</td></tr><tr><td><i>getNumberAvailableCorrect</i></td><td>Function to get number</td></tr></table>		<i>initQuestion</i>	Initialize question	<i>selectDxImage</i>	Determine if user's answer was right	<i>SubmitLevel2answers</i>	Submit answers for level 2	<i>processAnswersChoices</i>	Increase score if answer was right. If user wins or loses the level, send them to the correct page	<i>getNumberAvailableCorrect</i>	Function to get number
<i>initQuestion</i>	Initialize question												
<i>selectDxImage</i>	Determine if user's answer was right												
<i>SubmitLevel2answers</i>	Submit answers for level 2												
<i>processAnswersChoices</i>	Increase score if answer was right. If user wins or loses the level, send them to the correct page												
<i>getNumberAvailableCorrect</i>	Function to get number												

			available correct
Level2a.php	Security.php Dbutils.php Question.php Header.php Footer.php	Determines if the selected image is correct or not. If it is correct, send info to update score as true and bring up new question. IF false, send info to updatescore data and upload new question	
		<i>getScore</i>	Takes amount variable, calculates score
Level2tutorial	Security.php Dbutils.php Question.php Header.php Footer.php	Display tutorial for level 2	
Level3.php	Security.php Header.php Footer.php	Page for level 3 of the game	
		<i>initQuestion</i>	Initialize question
		<i>loadLevel3Question</i>	Take data argument, load level 3 questions
		<i>getImageDataFromSelection</i>	Iterate through images and get data
		<i>randomizeSelectableTerms</i>	Randomize choices for question
		<i>submitLevel3Answers</i>	Submit answers for level 3, redirect depending on amount right or wrong
Level3a.php	Security.php Dbutils Question.php Header.php Footer.php	Determines if the selected image is correct or not. If it is correct, send info to update score as true and bring up new question. IF false, send info to updatescore data and upload new question	

		<i>saveSelectedPairs</i>	Save image matches to be scored
		<i>selectDiagnosisMatch</i>	Function to store the diagnosis selection
		<i>selectImageMatch</i>	Function to store the image selection
		<i>calculateScore</i>	Calculate score
		<i>getScore</i>	Function to calculate score
Level3tutorial.php	Security.php Dbutils.php Question.php Header.php Footer.php	Tutorial for level 3	
Logout.php	None	Reset session data	
Practice.php	Security.php Dbutils.php Question.php Header.php Footer.php	Load up practice page for game	
Practicemenu.php	Security.php Dbutils.php Question.php Header.php Footer.php	Display the practice menu	
practiceQuestion.php	Security.php Dbutils.php Levelsecurity.php Question.php Header.php Footer.php	Display a practice question	
Quiz.php	Security.php Header.php Footer.php logquizanswer	Page for quiz	
		<i>loadQuestion()</i>	Load quiz question
		<i>submitQuestion</i>	Submit answer
		<i>getCorrectQuestionChoice</i>	Function to get correct question choice
Quizscorecard.php	Security.php Dbutils.php	Page to display quiz score card	

	Question.php Header.php Footer.php Quizscorecard.php	
Scorecard.php	Security.php Dbutils.php Question.php Header.php Footer.php	Page for the game score card
Tutorial.php	Security.php Dbutils.php Question.php Header.php Footer.php	Page to display quiz tutorial
Win.php	Security.php Dbutils.php Levelsecurity.php Question.php Header.php Footer.php	Win page for game

Database Accesses

<u>Class</u>	<u>Access Which Databases</u>
Admin Folder	
<i>Questiondetails.php</i>	Questions Categories Questions_images distractors
<i>Questionlist.php</i>	Questions
<i>Remove_image.php</i>	Questions_images
<i>Question.php</i>	Questions Questions_levels Questions_images Images Used_question_log Distractors
Rest Folder	
<i>Getaccess.php</i>	Pageaccess
<i>getDistractors</i>	Distractors Questions
<i>getPracticeQuestions</i>	Categories Questions
<i>Getscore.php</i>	Score Questioncomplete
<i>Getuserlist.php</i>	Drupal101.drupal_users

<i>Leaderboard_ws.php</i>	Dentalgame.scorelog
<i>Levelsummary.php</i>	Scorelog Answerlog
<i>Logquizanswer.php</i>	Quizanswerlog
<i>Question_ws.php</i>	Questions Questions_images Images Distractors Questions_levels
<i>Quizquestion_ws.php</i>	Quizquestions Quizquestionchoices
<i>Quizscorecard_ws.php</i>	Quizanswerlog
<i>Scorecard_ws.php</i>	Scorelog
<i>Updateaccess.php</i>	Pageaccess
<i>Updateanswerlog.php</i>	Answerlog
<i>Updatescore.php</i>	Score
<i>Updatescorelog.php</i>	Scorelog
Main Folder	
<i>Auth.php</i>	Drupal101.drupal_users

Databases (Primary Key is Bolded) – Double Check with db_07_30_2017_2.sql

Table	Key	Constraint	References
<u>answerlog</u>			
ScoreID			
userID			
Fk_questionID	Fk_answerlog_questions_idx	Fk_answerlog_questions	questions (question ID)
Fk_imageID	Fk_answerlog_images_idx	Fk_answerlog_images	Images (imageID)
isCorrect			
attemptID			
levelID			
levelAttemptNumber			
dateTimeSelected			
<u>Categories</u>			
categoryID			
categoryName			
<u>Distractors</u>			
distractorID			
Fk_forQuestionID	Fk_distractors_questions_idx	Fk_distractors_questions_forQuestionID	Questions (questionID)
Fk_distractorQuestionID	Fk_distractor_questions_distractorQuestionID_idx	Fk_distractor_questions_distractorQuestionID	Questions (questionID)
<u>Images</u>			
imageID			
imageFolder			
imageName			
<u>Pageaccess</u>			

pageaccessID			
userID			
AttemptID			
levelAccess			
accessDateTime			
<u>Questions</u>			
questionID			
diagnosisName	Idx_diagnosisName		
Fk_categoryID	Fk_questions_categories_idx	Fk_questions_categories	Categories (categoryID)
Hint			
numberOfImages			
<u>Questions images</u>			
Fk_questionID		Fk_questions_images_questions	Questions (questionID)
Fk_imageID	Fk_questions_images_images_idx	Fk_questions_images_images	Images (imageID)
<u>Questions levels</u>			
Fk_questionID		Fk_questions_levels_questions	Questions (questionID)
levelID			
<u>Quizanswerlog</u>			
logID			
userID			
Fk_quizQuestionID	Fk_quizanswerlog_questions_questionID_idx	Fk_quizanswerlog_questions_questionID	Quizquestions (questionID)
Fk_quizChoiceID	Fk_quizanswerlog_questionchoices_questionID_idx	Fk_quizanswerlog_questionchoices_questionID	Quizquestionchoices (choiceID)
isCorrect			
dateTimeAnswered			
<u>Quizquestionchoices</u>			
choiceID			
Fk_questionID			
choiceText			
isCorrect			
<u>Quizquestions</u>			
questionID			
questionStem			
isActive			
<u>Scorelog</u>			
autoID			
attemptID			
levelID			
Fk_userID			
logDateTime			
levelAttemptNumber			
isLevelComplete			
finalLevelScore			
numberQuestionsAnswered			
numberCorrect			
numberIncorrect			
<u>Subclassifications</u>			
Fk_questionID			
Fk_categoryID			

Used_question_log			
attemptID			
questionID	Fk_used_question_log	Fk_used_question_log_questions	Questions (questionID)
levelID			

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 dataset
	displayMonthSelectList	Displays the month and current time in the HTML page
Image.php	__construct	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	
stringUtilities	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: <ol style="list-style-type: none"> 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

		<p>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.</p> <ul style="list-style-type: none"> - Image: img_XXXXXXXXXXXXXXXXXXXXX - Magnifying glass: mag_XXXXXXXXXXXXXXXXXXXXX - Select button: sel_XXXXXXXXXXXXXXXXXXXXX <p>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</p>
	getSelectedImageData	<p>This function is a hack to deal with scope and lifecycle of jQuery objects and event handlers.</p> <p>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.</p> <p>This function returns 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</p>
	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	<p>Retrieves a JSON string returned by a web service located at a specified URL.</p> <p>Utilizes jQuery to make</p>

		<p>an Ajax call to a web service or a script that</p> <p>returns a JSON string</p>
tableBuilder.js	runQuery	<p>Retrieves a JSON string based on an SQL query.</p> <p>Utilizes jQuery to rest/resultstojson.php - a PHP script that generates</p> <p>a JSON string based on an SQL query</p>
	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	<p>Generates HTML tables based on SQL query results. These tables are 'question'</p> <p>tables - they display data students need to build a query/report.</p> <p>Right now the queries are hardcoded - we'll need pull this data from a</p> <p>database in the long run</p>
	getPuzzleTables	<p>Not finished?</p> <p>Does not seem to be relevant to pharmacy quiz</p>
Reportutils.py	pivotFromQuery	Pivots data from query
	spreadsheetFromQuery	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	Computes 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
	convertDAtetimeMySQL	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	