PHP DbConnect API

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# Introduction

The PHP DbConnect API is a useful abstraction for querying simple databases for statistical information and representations. Included is a simple way to represent tables in a modular manner. The basic class structure is described below.



# Data Members

|  |  |  |
| --- | --- | --- |
| Type | Name | Description |
| PDO | **m\_conn** | Reference to the specified database |
| String | **m\_tblname** | The name of the table within the database |
| String | **m\_db** | Database host name |
| String | **m\_dbname** | Name of the database |
| String | **m\_user** | Username for the database |
| String | **m\_pass** | Password for the database |

# Constructors & Initializers

|  |  |  |  |
| --- | --- | --- | --- |
| Return Type | Name | Arguments | Description |
| void | **Database** | String db  String dbname  String user  String pass | Fills in the relevant data members and calls the Connect() helper function to establish the database connection |
| void | **Connect** | void | Establishes the database connection, implicitly called by constructor for Database object |
| void | **SetTable** | String tblname | Specifies the name of the table to be queried |

# Query Functions

|  |  |  |  |
| --- | --- | --- | --- |
| Return Type | Name | Arguments | Description |
| array | **GeneralQuery** | String sql | Execute a user-specified query with a properly formatted SQL string |
| int | **GetTotal** | void | Get the total number of records in the table |
| int | **GetTotalRange** | String rangeCol  String low  String high | Get the total number of records in the table between the dates low and high |
| array | **GetDataPointsInRange** | String rangeCol  String[] lows  String[] highs | Get the total number of records in the table between several sets of dates |
| void | **PrintDataPoints** | String rangeCol  String[] lows  String[] highs | Print the records in HTML between the dates specified in lows and highs |
| int | **Multi\_GetTotalRange** | String[] rangeCols  String[] lows  String[] highs | Get the total number of records in several ranges |
| int | **Multi\_PrintDataPoints** | String[] rangeCols  String[][] lowsS  String[][] highs | Print data points according to several columns in the table between several ranges |
| int | **Multi\_AverageInRange** | String[] rangeCols  String[] lows  String[] highs | Get the average number of entries between each lows and highs according to a specified column |
| int | **AverageInHourRange** | String rangeCol  String low  String high  int hour\_low  int hour\_high | Get the average number of entries from dates low to high between hour\_low and hour\_high each day |
| array | **AverageInHourRanges** | String rangeCol  String low  String high  int[] hour\_lows  int[] hour\_highs | Get the average number of entries from dates low to high for each range hour\_low to hour\_high each day |
| int | **MaxInHourRange** | String rangeCol  String low  String high  int hour\_low  int hour\_high | Get the max number of entries from dates low to high between hour\_low and hour\_high each day |
| array | **MaxInHourRanges** | String rangeCol  String low  String high  int[] hour\_lows  int[] hour\_highs | Get the max number of entries from dates low to high for each range hour\_low to hour\_high each day |
| int | **MinInHourRange** | String rangeCol  String low  String high  int hour\_low  int hour\_high | Get the min number of entries from dates low to high between hour\_low and hour\_high each day |
| array | **MinInHourRanges** | String rangeCol  String low  String high  int[] hour\_lows  int[] hour\_highs | Get the min number of entries from dates low to high for each range hour\_low to hour\_high each day |
| int | **MedianInHourRange** | String rangeCol  String low  String high  int hour\_low  int hour\_high | Get the median number of entries from dates low to high between hour\_low and hour\_high each day |
| int | **ModeInHourRange** | String rangeCol  String low  String high  int hour\_low  int hour\_high | Get the mode number of entries from dates low to high between hour\_low and hour\_high each day |