CpSc 462/662: Database Management Systems (DBMS) (TEXNH Approach)

MySQL with PHP

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PHP MySQL Extensions

- PHP MySQL extensions include a set of functions that allow you to access MySQL database servers.
- More information about MySQL can be found at http://www.mysql.com/.
- Documentation for MySQL can be found at http://dev.mysql.com/doc/.

Example

```
<?php
    // Connecting, selecting database
    $link = mysql_connect('mysql_host', 'mysql_user', 'mysql_password')
       or die('Could not connect: ' . mysql_error());
    echo 'Connected successfully';
    mysql_select_db('my_database') or die('Could not select database');

    // Performing SQL query
    $query = 'SELECT * FROM my_table';
    $result = mysql_query($query) or die('Query failed: ' . mysql_error());

    // Printing results in HTML
    echo "<table>\n";
    while ($line = mysql_fetch_array($result, MYSQL_ASSOC)) {
       echo "\t<tr>\n";
       foreach ($line as $col_value) {
          echo "\t\t<td>$col_value</td>\n";
       }
       echo "\t</tr>\n";
    }
    echo "</table>\n";

    // Free resultset
    mysql_free_result($result);

    // Closing connection
    mysql_close($link);
?>
```


MySQL Functions

- **mysql_affected_rows**
  - Get number of affected rows in previous MySQL operation
- **mysql_change_user**
  - Change logged in user of the active connection
- **mysql_client_encoding**
  - Returns the name of the character set
- **mysql_close**
  - Close MySQL connection
- **mysql_connect**
  - Open a connection to a MySQL Server
- **mysql_create_db**
  - Create a MySQL database
- **mysql_data_seek**
  - Move internal result pointer

MySQL Functions (cont.)

- **mysql_db_name**
  - Get result data
- **mysql_db_query**
  - Send a MySQL query
- **mysql_drop_db**
  - Drop (delete) a MySQL database
- **mysql_errno**
  - Returns the numerical value of the error message from previous MySQL operation
- **mysql_error**
  - Returns the text of the error message from previous MySQL operation
- **mysql_escape_string**
  - Escapes a string for use in a mysql_query

MySQL Functions (cont.)

- **mysql_fetch_array**
  - Fetch a result row as an associative array, a numeric array, or both
- **mysql_fetch_assoc**
  - Fetch a result row as an associative array
- **mysql_fetch_field**
  - Get column information from a result and return as an object
- **mysql_fetch_lengths**
  - Get the length of each output in a result
- **mysql_fetch_object**
  - Fetch a result row as an object
- **mysql_fetch_row**
  - Get a result row as an enumerated array

MySQL Functions (cont.)

- **mysql_field_flags**
  - Get the flags associated with the specified field in a result
- **mysql_field_len**
  - Returns the length of the specified field
- **mysql_field_name**
  - Get the name of the specified field in a result
- **mysql_field_seek**
  - Set result pointer to a specified field offset
- **mysql_field_table**
  - Get name of the table the specified field is in
- **mysql_field_type**
  - Get the type of the specified field in a result

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MySQL Functions (cont.)

- **mysql_free_result**
  - Free result memory
- **mysql_get_client_info**
  - Get MySQL client info
- **mysql_get_host_info**
  - Get MySQL host info
- **mysql_get_proto_info**
  - Get MySQL protocol info
- **mysql_get_server_info**
  - Get MySQL server info
- **mysql_info**
  - Get information about the most recent query
- **mysql_insert_id**
  - Get the ID generated from the previous INSERT operation

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MySQL Functions (cont.)

- **mysql_list_dbs**
  - List databases available on a MySQL server
- **mysql_list_fields**
  - List MySQL table fields
- **mysql_list_processes**
  - List MySQL processes
- **mysql_list_tables**
  - List tables in a MySQL database
- **mysql_num_fields**
  - Get number of fields in result
- **mysql_num_rows**
  - Get number of rows in result
- **mysql_pconnect**
  - Open a persistent connection to a MySQL server
- **mysql_ping**
  - Ping a server connection or reconnect if there is no connection

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MySQL Functions (cont.)

- **mysql_query**
  - Send a MySQL query
- **mysql_real_escape_string**
  - Escapes special characters in a string for use in a SQL statement
- **mysql_result**
  - Get result data
- **mysql_select_db**
  - Select a MySQL database
- **mysql_set_charset**
  - Sets the client character set
- **mysql_stat**
  - Get current system status
- **mysql_tablename**
  - Get table name of field
- **mysql_thread_id**
  - Return the current thread ID
- **mysql_unbuffered_query**
  - Send an SQL query to MySQL, without fetching and buffering the result rows

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