

Perl Training



A simple Address Book

<http://perlwizard.org/perl/week14>

Agenda

- Homework Review
- Setting up the Database
- Accessing Data
- DBI
- CGI with DBI
- Homework!!!

MySQL Databases

Create a file that has the following in it:

```
CREATE TABLE address_book (  
  id int(20) DEFAULT " NOT NULL,  
  name char(50) DEFAULT '' NOT NULL,  
  address1 char(20),  
  address2 char(20),  
  city char(20),  
  state char(20),  
  zip_code char(10) DEFAULT '' NOT NULL,  
  PRIMARY KEY (id),  
  KEY idx_name (name),  
  KEY idx_zip_code (zip_code)  
);
```

Creating tables



Run “mysql primary < filename.txt”

This will create the address_book table. To see what it looks like, type “mysql primary”. Then type “describe address_book” at the mysql prompt.

Inserting/Updating Data Manually

At the mysql prompt, type the following:

```
> insert into address_book (id,name) values ('1', 'Jason Noble');
```

```
> select * from address_book;
```

```
+----+-----+-----+-----+-----+-----+-----+
| id | name       | address1 | address2 | city | state | zip_code |
+----+-----+-----+-----+-----+-----+-----+
|  1 | Jason Noble | NULL     | NULL     | NULL | NULL  |          |
+----+-----+-----+-----+-----+-----+-----+
```

```
1 row in set (0.00 sec)
```

```
> update address_book set zip_code = '98006' where name = 'Jason Noble';
```

Using DBI

```
#!/usr/bin/perl5
use DBI;
$dbhost = 'localhost';
$dbdatabase = 'primary';
$dbuser = 'jnobles';
$dbpasswd = "";
$driver = 'mysql';
$dsh = "DBI:$driver:database=$dbdatabase:host=$dbhost;";
# Connect to database
$dbh = DBI->connect($dsh, $dbuser, $dbpasswd) || die $DBI::errstr;
my $x = $DBI::errstr;
if($x){print "DB Error: $x\n";}
```

```
my $query = "select name from
address_book";
local $sth = $dbh->prepare($query);
$sth->execute;
my $x = $DBI::errstr;
if ($x) {&log_err("$x\n");}
while( @row = $sth->fetchrow_array) {
    (my $name) = @row;
    print "Name: $name\n";
}
# Prints Name: Jason Noble
```

Updating Information

First part of last program, connect to database, etc...

```
my $query = "update address_book set zip_code = '98006' where name = 'Jason Noble';  
local $sth = $dbh -> prepare($query);  
$sth -> execute;
```

More of the program

DBI with CGI

```
# Print CGI header and Connect to database
my $query = "select name,zip_code from address_book";
local $sth = $dbh->prepare($query);
$sth->execute;
my $x = $DBI::errstr;
if ($x) {&log_err("$x\n");}
print "<TABLE>\n";
while( @row = $sth->fetchrow_array)
{
    local ($name, $zip_code) = @row;
    print "<TR><TD>$name</TD><TD>$zip_code</TD></TR>\n";
}
print "</TABLE>\n";
```

Homework

- Create a database, and a table that has at least 5 fields. Put some sample data into the table.
- Create a web page front end to the table, so that it will display the data you have in the table.

Questions?

