WikiPluginsDbTutorial

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Tutorial for Database interfacing

This is a tutorial for working examples for WikiPluginsDb. The code has been developed by YannickMajoros.

There are eight plugins that make up the functionality of the WikiPluginsDb, which can be Downloaded here. A basic knowledge of SQL is needed.

Things to note:

- 1. Wiki plugins are processed back-to-front by Tiki, meaning what is located at the bottom of the page is executed first. This means all of your database requests {REQUEST} should be at the bottom of the page.
- 2. Although plugins are **processed** or executed in reverse order by Tiki, they do **display** in the right order. Where you place the plugin objects on the page is where they appear
- 3. If you get a blank page, maybe you came across the Tiki adodb bug with dsn's. Check YannickMajoros post about it on the dev list for an explanation and a quick fix.

Working with these examples

- 1. To install the plugins to your tiki wiki site, uncompress the package to this directory lib/wiki-plugins/
- 2. In your MySQL database create a table called *Students* with the following fields:
 - 1. Id (autoincrement)
 - 2. First_Name
 - 3. Last_Name
- 3. Add some data into the Student so there is something to display
- 4. Create a dsn to tell the plugins how to connect to your database(s). The plugins can use multiple databases. If the name of your DSN is *default*, you won't have to specify it. To create a new DSN expand the 'Admin menu' and select 'DSN'. Create a DSN called "default???
- 5. When a DSN is created it produces a permission in the name of tiki_p_DNS_(what you named your DNS). Set the permissions in Admin menu->Group for the users that will have access to view the page.
- 6. In order for this plugin to work correctly you must disable the cache, goto Admin->Wiki->Cache wiki

pages (global), set to 0.

7. Create a wiki page and paste the example and press save.

Examples

Display all data from a table:

★
{DATATABLE()}
{DATATABLE}

```
{REQUEST()}
SELECT * FROM Students
{REQUEST}
```

Comments:

- Your SQL statements are executed using the REQUEST plugin, notice it is at the bottom of the page.
- In this example the REQUEST plugin has no db parameter, so it will take the default DSN (=dsn named *default*).
- The DATATABLE plugin generates a table from the SQL statement found in the REQUEST plugin
- When the DATATABLE is used without any parameters it will displays the data from the first 'default' request

Display data from a table with nested links

```
X
{DATATABLE(title=>1)}
__Id.__|_First name__|_Last name__|_''Links''__
*Id|*First_Name|*Last_Name|LINK:More info:StudentInfo:Id=*Id
{DATATABLE}
{REQUEST()}
```

```
SELECT Id, First_Name, Last_Name FROM Students
{REQUEST}
```

Comments:

- The DATATABLE plugin has the *title* parameter set, so the first row is the title row.
- Rows are separated by | , as are Tiki tables.
- The second line contains the template for the remaining rows. This relies on normal wiki formatting such as links. Database field names have a * before them (*First_Name)
- The SQL statement must specify each field name to be returned
- The link in the Links column is intended to provide more information on the student selected, see 'Using the navigator' example.

Adding new records

```
{DATATABLE(title=>1)}
__Id.__|_First name_|_Last name_|__''Links''___
*Id|*First_Name|*Last_Name|LINK:More info:StudentInfo:Id=*Id
{DATATABLE}
{FORM(update=>Create)}
__First name:__ {FIELD(name=>First_Name)}{FIELD}
__Last name:__ {FIELD(name=>Last_Name)}{FIELD}
{FORM}
{REQUEST(cursor=>1)}
SELECT Id, First_Name, Last_Name FROM Students
{REQUEST[id=>new_student,cond=>update)}
INSERT IGNORE INTO Students SET First_Name='?First_Name', Last_Name='?Last_Name'
{REQUEST}
```

Comments:

- A FIELD can be used to display or edit data. A FORM can create a submit button which will perform an action involving the encapsulated FIELD's.
- The *update* parameter of the *FORM* plugin is simply some text for the *Submit* button, which will display automatically unless you specify it.
- The cond=>update parameter on the REQUEST field tells that this REQUEST will only be executed if an update parameter has been given to the page, which is automatically the case when you submit a form using {FORM} (unless you specify otherwise with the noupdate parameter in FORM)
- The *id* parameter is the name of the request, which you could use in *FIELD* or *DATATABLE* with their *from* parameter. If you don't specify a name, unnamed requests will be numbered, beginning with 0 (which will be the default request).
- If you set the cursor=>1 on *REQUEST*, the data table will display navigation buttons for moving between result pages.

Counting records in a table

```
{REQUEST(id=>Row_Count)}
SELECT COUNT(*) Record_Count FROM Students
{REQUEST}
```

Comments:

×

- This will display the number of rows in the table
- Notice how the FIELD statement is mixed in with the wiki formatting

Using the Navigator

```
{FORM(id=>Form_Name, from=>Request_Name)}
{FORM(id=>Form_Name, from=>Request_Name, src=>First_Name)}{FIELD}
__Text Box:___ {FIELD(name=>Field_Name1, from=>Request_Name, src=>First_Name)}{FIELD}
__Check Box:___{FIELD(type=>chk, src=>Last_Name, size=>150, from=> Last _Name)}{FIELD}
__Comment box: ____{FIELD(type=>memo, src=>Last_Name, from=>Request_Name)}{FIELD}
__Select: ____{FIELD(type=>select, src=>First_Name, from=> Request_Name, choices=>Student, ch_field=>Student.First_Name, nopos=>1)}{FIELD}
```

{NAVIGATOR(from=>Request_Name, key=>Id, table=>Student)}{NAVIGATOR}

{REQUEST(id=Request_Name)}
SELECT Id, First_Name, Last_Name from Students where Id='?Id'
{REQUEST}

Comments:

- The NAVIGATOR will product the following error 'Navigator: position unknown..' at the end of the URL you will need to pass &Id=1 now the Navigator will work and the fields will populate.
- The check box will be ticked if there is data in the field, if the field is null then the check box will be empty
- nopos= if the table contains a column 'Pos' it can be used to order the options. Set this value to 1 if you do not have this column in the table.
- choices=DNS name/SQL table name. if useing default as the DNS use just the SQL table name.
- ch_field= field name in the sql statement to return the results from (Table_Name.Feild_Name)
- noadmin= removes the admin link on combobox's, default is active

More

There is much, much more to it. You could let the plugins make backups of your updates and add history into another table automatically, simply by setting flags. A lot of the features have not yet been documented.