

Enterprise Web Framework

http://127.0.0.1:8000/app/default/index

```
http://hostname/application/controller/flunction/args/vars

run application
response (dict)
rendered by
controller py
controller flunction.html
page body as string
rendered HTTP error
exception (trcket issued)
function.html
```

app/models/db.py

```
db=SQLDB('sqlite://data.db',pools=0)
db.define_table('person',
    db.Field('name','string'))
db.person.name.default='Anonymous'
db.person.name.requires=IS_NOT_EMPTY()
```

```
app/controllers/default.py
```

```
def index():
    form=SQLFORM(db.person)
    if form.accepts(request.vars,session):
        session.flash='record inserted'
        redirect(URL(r=request,f='index'))
    elif form.errors:
        response.flash='there are errors'
    persons=db(db.person.id>0).select()
    return dict(form=form,persons=persons)
```

```
{{extend 'layout.html'}}
<h2>Create Person</h2>
{{=form}}
<h2>Persons</h2>

{{for person in persons:}}
{{=LI(person.name)}}
{{pass}}
```

app/views/default/index.html

```
type='string'
length=64
default=None
required=False
requires=validators
ondelete='CASCADE'
notnull=False
unique=False
uploadfield=None
```

string
text
blob
password
upload
boolean
integer
double
date
time
datetime

```
request.cookies
request.args
request.vars
request.get_vars
request.post_vars
request.client
request.application
request.controller
request.function
request.folder
request.env.host_name
request.env.path_info
request.env..
```

```
db.table.insert(field=val)
query=db.table.id>5
query=query1&query2
query=query1|query2
db(query).count()
db(query).delete()
rows=db(query).select(
   field1, field2, ...,
   left=[db.table.on(query)],
   orderby=field|~field,
   groupby=field|field
   limitby=(0,10),
   cache=(cache.ram,5000))
```

```
IS NOT EMPTY(error message='...')
IS ALPHANUMERIC()
IS DATE ('%Y-%m-%d')
IS DATETIME ('%Y-%m-%d %H:%M:%S')
IS EMAIL()
IS EXPR('value>3')
IS FLOAT IN RANGE (0,10)
IS INT IN RANGE (0,10)
IS IN SET(['a','b','c'])
IS LENGTH (32)
IS LOWER()
IS UPPER()
IS MATCH(' \setminus w\{5\}')
IS TIME ()
IS URL()
IS IN DB(db, 'table.field', '% (field) s')
IS NOT IN DB(db,'table.field')
IS NULL OR (validator)
IS LIST OF (validator)
CLEANUP()
CRYPT()
```

```
response.render('view.html',dict(...))
response.xmlrpc(response,[functions])
response.stream(filename,chunk_size)
response.cookies['name']='value'
response.headers['name']='value'
response.view='default/index.html'
response.flash='a flashing message'
response.status=200
response.title='this app'
response.subtitle='the best'
response.author='you'
response.keywords='keywords'
response.description='something'
response.menu=[
   ['name',false,URL(...)],
```

```
URL(r=request,a='a',c='c',f='f',
    args=[1,2], vars=dict(g=3)) =>
    '/a/c/f/1/2?q=3'
XML(string, sanitize=False,
    permitted tags=[..],
    allowed attributes={...})
BEAUTIFY (object)
T.force('en-US')
T('message') =>
    'translated message'
DIV('a', class='b') =>
    '<div class="b">a</div>'
TAG.div('a', class='b') =>
    '<div class='b'>a</div>'
CODE ('print a', language='web2py' or
'python' or 'html' or 'cpp')
HTML BODY SPAN A IMG P CENTER
HEAD TITLE LINK SCRIPT STYLE META
HR BR IFRAME H1 H2 H3 H4 H5 H6
FORM INPUT TEXTAREA LABEL FIELDSET
SELECT OPTION B EM I TT UL OL LI
TABLE THEAD TBODY TFOOT TH TR TD
EMBED OBJECT PRE
ON=True
```