

---

# Catalist Documentation

*Release 0.0*

**Rachel Wu, Tony Zhang**

January 18, 2016



## CONTENTS

<b>1</b>	<b>Indices and tables</b>	<b>5</b>
	<b>Python Module Index</b>	<b>7</b>
	<b>Index</b>	<b>9</b>



Contents:

```

class routes.Catalist (*args, **values)
    A class for our lists (Catalists :P)

class routes.CatalistEntry (*args, **kwargs)
    A class for the entries in our Catalists

class routes.CatalistKVP (*args, **kwargs)
    A class for individual key-value pairs in our Catalist entries

exception routes.InvalidAPIUsage (message, status_code=None, payload=None)
    A class for exceptions to raise in invalid API usage. Shamelessly pillaged from Flask's documentation

class routes.Role (*args, **values)
    A class for user roles (e.g. user, admin, ...)

class routes.User (*args, **values)
    A class for users. Can have any/none of these attributes.

routes.about ()
    About us.

routes.admin_unames = ['rmwu', 'txz']
    Currently admins are determined by residency on this list. Hacky, I know. ____

routes.autocomplete ()
    completes a word fragment with a possible list type usage: POST to this route with {"fragment": myfragment},
    response is the list of possible completions of myfragment drawn from autocomplete_dict

routes.cmp_permission (perm1, perm2)
    Return a positive/0/negative integer when perm1 >=/< perm2

routes.create_list ()
    Create a new list and return the assigned listid

    Returns: the assigned listid

routes.entry_delete ()
    Delete an entry from a Catalist. Requires at least edit permission.

    usage: POST a JSON associative array as follows: {

        listid: <the id of the Catalist>, entryind: <the index of the entry to remove>

    }

routes.entry_title_save ()
    AJAXily save the title of an entry. Requires at least edit permission

    usage: POST a JS associative array (basically a dict) like so: {

        listid: <the list id>, entryind: <index of entry w.r.t. list (0-indexing)>, newvalue: <new entry title>

    }

routes.get_id ()
    Return name of current user

routes.getlist (listid)
    Display a list with given listid from our database.

routes.human_readable_time_since (tiem)
    Give a human-readable representation of time elapsed since a given time

    Parameters tiem – a datetime object representing the given time.

```

`routes.index()`  
Our homepage!

`routes.key_save()`  
Save a key. Requires at least edit permission.  
POST a JS associative array (basically a dict) like so: {  
    listid: <the list id>, entryind: <index of entry w.r.t. list (0-indexing)>, index: <index of key-val pair w.r.t. entry>, newvalue: <new value of key>  
}

`routes.kvp_delete()`  
Delete a key-value pair from a Catalist entry. Requires at least edit permission.  
usage: POST a JSON associative array as follows: {  
    listid: <the id of the Catalist>, entryind: <the index of the entry to remove>, index: <the index of the kvp within the entry>  
}

`routes.list_delete()`  
Delete a Catalist. Requires at least own permission  
usage: POST a JSON associative array as follows: {  
    listid: <the id of the list to be deleted>  
}

`routes.list_save()`  
Save an entire list. If listid is provided, the list is written onto the referenced list. Otherwise, a new list is created. In both cases the listid to which we saved the list is returned.  
usage: {  
    title: <thetitle>, contents: [  
        [title, [ attrname, attrval], ... ]  
    ] (optionally) , listid: <the listid to save to>  
}  
Returns: the given or assigned listid

`routes.list_title_save()`  
AJAXily save the title of a Catalist ^\_^ Requires at least edit permission.  
usage: POST a JS assoc array like so: {  
    listid: <the list id>, newvalue: <our new title>  
}

`routes.login()`  
Page for user login

`routes.logout()`  
Log out the current user, clearing the Remember Me cookie

`routes.make_list()`  
Upon making the first edit, an empty list will be created for the insertion of more data

`routes.perm_list = ['none', 'view', 'edit', 'own', 'admin']`

A list of all permission levels, from lowest to highest. The levels:

- 1.none – no permission
- 2.view – permission to view a list
- 3.edit – permission to edit a list
- 4.own – permission to change permission for a list
- 5.admin – can do anything

`routes.permissions_get ()`

Get the permission level a user has for a particular list.

usage: POST the following: {

listid: <the listid>

}

returns: {

permission: <the current permission>

}

`routes.permissions_set ()`

{ Set permissions for a user. Requires at least own permission

listid: <listid>, target: <username of user to set perms with>, permission: { none | view | edit | own | admin }

}

`routes.preview_list (listid)`

Fetch the list with given listid from our database, display with template

`routes.query_cur_perm (catalist)`

Finds the permission the current user has for list *catalist*

`routes.query_permission (user, catalist)`

Gives the permission level a user has for a list. “None” represents an anonymous user.

`routes.register ()`

Page for user registration

`routes.signin ()`

Sign the user in, given valid credentials.

`routes.signup ()`

Sign the user up, given valid credentials and a username the doesn’t already exist in our database.

`routes.userlists (*args, **kwargs)`

A page displaying all lists belonging to the user.

`routes.value_save ()`

Save the value in a particular key-value pair. Requires at least edit permission.

The API is virtually identical the that of `key_save()`

`routes.vote ()`

Two options: 1. Update the database to incorporate a user’s vote on an entry. 2. Find the user’s current vote and the current score of the entry. Requires at least view permission

usage: POST the following {

```
listid: <listid>, entryind: <entryind>, userid: <userid>, vote: { 1 (upvote) | 0 (no vote) |  
    -1 (downvote) | 100 (get the current vote) }  
}
```

**Returns** a response with the following forms:

```
if vote == 100 { current_vote: <the user's current vote>, score: <the entry's current score>  
} if vote != 100 {  
    current_vote: <the vote just made>, score: <the entry's new score>  
}
```



## INDICES AND TABLES

- `genindex`
- `modindex`
- `search`



**r**

routes, 1



## A

about() (in module routes), 1  
admin\_unames (in module routes), 1  
autocomplete() (in module routes), 1

## C

Catalist (class in routes), 1  
CatalistEntry (class in routes), 1  
CatalistKVP (class in routes), 1  
cmp\_permission() (in module routes), 1  
create\_list() (in module routes), 1

## E

entry\_delete() (in module routes), 1  
entry\_title\_save() (in module routes), 1

## G

get\_id() (in module routes), 1  
getlist() (in module routes), 1

## H

human\_readable\_time\_since() (in module routes), 1

## I

index() (in module routes), 1  
InvalidAPIUsage, 1

## K

key\_save() (in module routes), 2  
kvp\_delete() (in module routes), 2

## L

list\_delete() (in module routes), 2  
list\_save() (in module routes), 2  
list\_title\_save() (in module routes), 2  
login() (in module routes), 2  
logout() (in module routes), 2

## M

make\_list() (in module routes), 2

## P

perm\_list (in module routes), 2  
permissions\_get() (in module routes), 3  
permissions\_set() (in module routes), 3  
preview\_list() (in module routes), 3

## Q

query\_cur\_perm() (in module routes), 3  
query\_permission() (in module routes), 3

## R

register() (in module routes), 3  
Role (class in routes), 1  
routes (module), 1

## S

signin() (in module routes), 3  
signup() (in module routes), 3

## U

User (class in routes), 1  
userlists() (in module routes), 3

## V

value\_save() (in module routes), 3  
vote() (in module routes), 3