Catalist Documentation Release 0.0

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```
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.add to my lists()
     Add a specified list to "My Lists". POST {
           listid: <listid>
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.qet id()
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Return name of current user

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routes.get_pref(*args, **kwargs)
      Get the preferred theme for the user POST: {
           uid: <uid>.
      } returns: {
           theme: \langle preferred theme [0, 1, ..] \rangle
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.isLoggedIn()
      Used for .js to call
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.key_val_save(req_form, key_or_val)
      Save a key or value in a KVP. Auxillary method for /api/savekey and /api/savevalue – captures repetitive code.
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], ... ]
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] (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.my lists interact (listid, addQ)
      Add or remove a list with specified listid from "My Lists".
           Parameters
                  • listid - the listid of the list
                 • addQ – an integer specifying whether to add or remove: 1 to add, -1 to remove
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}
      }
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routes.preview list(listid)
     Fetch the list with given listid from our database, display with template
routes.public_level_set()
     Set the permission level for a list for the public at-large. Requires own permission.
     POST: { listid: <the listid>, permission: {none | view | edit | own | admin}
      }
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.remove_from_my_lists()
     Remove a specified list from "My Lists". POST {
           listid: <listid>
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>
      }
```

CHAPTER

ONE

INDICES AND TABLES

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