DataMYNE Documentation

Release 1.0.0

The New School

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PROFILES: MODELS

class apps.profiles.models.ActivePersonManager

Bases: django.db.models.manager.Manager

The ActivePersonManager supports the Person class by restricting queries to only those people who have active user accounts.

class apps.profiles.models.AreaOfStudy(*args, **kwargs)

Bases: apps.profiles.models.BaseModel

An AreaOfStudy is a more amorphous grouping of courses that are not necessarily organized under the traditional hierarchy.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

class apps.profiles.models.BaseModel(*args, **kwargs)

Bases: django.db.models.base.Model

BaseModel is the root of almost all other objects within the DataMYNE system. It establishes the creation and modification date fields, as well as indicating which user last changed the given model. It also stubs out the permissions for a auth. User and other objects based upon their associations within the university's hierarchy of "units" (e.g. profiles.Division, profiles.School, etc.)

get unit()

get_unit returns the organizational unit that hold responsibility for this object. For example, a committee executing get_unit could return the division that has authority over it.

has_unit_permission(user)

Given a user, this method will check to see if that user is attached to the appropriate organizational unit to have access to edit this object. This allows people in higher levels of the university's hierarchy the ability to edit a greater number of objects, while restricting those lower down to objects that only affect their unit.

save (*args, **kwargs)

Every DataMyne object has a created_by field that contains the User object of the user who was logged in when the system created the object. The method uses the datamining.middleware module to access another thread and check on the current user.

unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.ContactEmail(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

ContactEmail is legacy code that needs to be refactored out"

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Course(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Course is an object that contains course information across time. A Section object is connected to a course and shows only the information that is specific to a particular semester and set of faculty.

The distinction between Course and Section is subtle but crucial. A course effectively lives outside of time. Faculty are never associated with a course. Nor are semesters. A section, by contrast, has associated with it a particular Semester as well as zero or many FacultyMember objects (it is possible to have zero faculty for a Section in cases where the faculty assignments are TBD.)

It is Mike Edwards's **strong** recommendation that the taken field by replaced with code that defines an Affiliation. See the documentation of the reporting app for a complete explanation of the design decision to favor Affiliation objects over simple ManyToManyField fields.

Also, the projects field should be refactored and removed, since the Project model is deprecated. It should be replaced with code that relates to Work objects instead, either as a ManyToMany or something similar to what the Affiliation object seeks to achieve between Person objects and every other DataMYNE class.

get_unit()

A Course is assumed to be under the authority of whatever organizational unit manages the course's Subject object.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.CourseImage(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Course Image connects a Course to an image file and associated metadata.

It is Mike Edwards's **strong** recommendation that this be refactored and migrated into a generic Image class that can relate the same data to a GenericForeignKey. This would allow images to decorate any other object within the DataMYNE system, allowing for a common set of code to handle image assets, rather than duplicating the effort. In addition, it may also be worth considering how a generic Image object could inherit from a generic Media object, leaving open the possibility of achieving similar efficiency for video, audio, and other unforeseen media.

Of course, some of this addresses issues at the heart of what DataMYNE is and what it ought to be. The degree to which this system stores (or references) other data depends largely on how much data needs to be internally understood by the system (for the purposes of searching, cross-referencing, etc.) and how much ought to be offloaded to the rest of the Web (e.g. Flickr, YouTube, etc.) At the time of writing, this issue is still very much in flux. As such, designing for flexibility (instead of performance or simplicity) is paramount.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their

model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Department(*args, **kwargs)
```

 $Bases: \verb"apps.profiles.models.BaseModel"$

A Department is one of the highest "units" within the university. Below it are programs. It sits at the same level as a Department

Historically, all divisions except Parsons the New School for Design have Departments.

authorities

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Division(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Division is the highest "unit" within the university. Below it are Department , School, etc.

authorities

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Expertise(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

An Expertise (sometimes called an area of expertise) is a canonical keyword that users can select to describe them in their profiles.

unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.FacultyMember(*args, **kwargs)
    Bases: apps.profiles.models.Person
```

A FacultyMember is a Person (believe it or not) that teaches one or more Section objects of a Course object. Their association with a Section is their key distinction with other Person objects.

```
class apps.profiles.models.Invitation(*args, **kwargs)
    Bases: django.db.models.base.Model
```

An Invitation object allows a host user to invite a guest user to be part of another object within the DataMYNE system. The guest can either be a registered user or someone with an email address outside of the university.

Once a guest receives his or her invitation email, they are directed to follow a url (composed of a unique slug) that will do one of the following:

- •if the user is a member of DataMYNE and is signed in, he or she will be taken directly to the object in question
- •if the user is a member of DataMYNE and is not signed it, he or she will be taken first to a login screen
- •if the user is not yet a member of DataMYNE, he or she will still be directed to the login screen.
 - -If he or she is able to join (e.g. has a listing within LDAP), a profile will automatically be created.
 - -If he or shee is not able to join, at this point, tough luck.

This last case is an interesting one, since DataMYNE still represents a closed community. The best way to deal with this is most likely best handled within the profiles.backends module. This will be most important for alumni who no longer can authenticate through LDAP, as well as incoming students who are not yet established within LDAP. In any case, the Invitation model should remain more or less agnostic to this.

content_object

Provides a generic relation to any object through content-type/object-id fields.

```
class apps.profiles.models.Link(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Link allows for adding a URL, plus description and other metadata, to any object in the system.

It should succeed WorkURL for Person links and be used for other DataMyne objects should links become useful with them.

content_object

Provides a generic relation to any object through content-type/object-id fields.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Organization(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

An Organization is an object that represents any number of kinds of groups that may appear within the university. It comprises everything from officially designated labs to ad hoc student groups.

The projects field should be refactored out and, most likely, replaced with some kind of relationship to the Work model (either via a new ManyToMany field or something akin to how the Person models relates to other objects via the Affiliation

affiliations

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

has_unit_permission(user)

Organization models don't have a parent unit, therefore there are no unit restrictions on this. This situation may change if the Sponsorship object becomes more widely used.

meetings

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.OrganizationType (*args, **kwargs)
```

Bases: apps.profiles.models.BaseModel

An OrganizationType defines a canonical category for Organization objects (e.g. lab, center, institute, etc.)

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Person(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Person represents any number of roles within the university, but provides a unifying class for dealing with all of them. The Person has fields for first and last name, N Number, etc. as well as several crucial class and object methods that pertain to all members of the university.

A Student, Staff, and Faculty Member object are all of the Person type.

activate(email)

An email-based activation method. This is deprecated since the introduction of the LDAP authentication

cv_text

Docstring

deactivate()

Deactivates a person's user account

group_perms_set

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

user perms set

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Program(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Program is typically the lowest organizational unit in the university. It sits below either a School or a Department.

affiliations

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

authorities

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Project(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

Project is a now defunct way of expressing what we now use Organizations and Works to accomplish. This should be retired.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Requirement (*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Requirement connects a Program to zero or more Course objects in order to define a program's requirements.

Although this relationship exists in the model code, there are currently no tools to manage this outside of the admin tool. Considerable thought and planning needs to go into how to manage this, as well as other models such as AreaOfStudy, etc.

unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.School(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A School is one of the the highest "units" within the university. Below it are programs. It sits at the same level as a Department

Historically, only Parsons the New School for Design has Schools.

authorities

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Section(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Section object is connected to a course and shows only the information that is specific to a particular semester and set of faculty. A Course is an object that contains course information across time.

Refer to the Course documentation for a more complete explanation of this distinction.

get_display_title()

Not all sections need to have their own title, but there are enough cases where the section of a course has a meaningfully different title that this ought to be shown instead (e.g. Parsons AMT Collab studios)

unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Semester(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Semester object represents the season and year in which a Section of a Course is held. Note that, in Banner exports, spring and summer semesters are list as part of the previous year. For example:

- •201010 is the fall semester of 2010
- •201030 is the spring semester of 2011

For simplicity's sake, however, we convert the banner code to the correct calendar year. Therefore, fall 2010 has the term "fa" and the year "2010" while spring 2011 has the term "sp" and the year "2011". All the conversions for this are done in the import script and should never need to be considered outside of that.

unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Sponsorship(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Sponsorship ties an organization to a bureaucratic unit, etc.

At the time of writing, this relationship exists only in the model code. The necessity of an organization's sponsorship will need to be determined as the Organization use cases and code achieve more maturity.

See the Authority class within the reporting documentation for an analog to this between Committee objects and organizational units.

content object

Provides a generic relation to any object through content-type/object-id fields.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.Staff(*args, **kwargs)
    Bases: apps.profiles.models.Person
```

A Staff member is a Person that works for the university in a role other than faculty. They are assigned to a Division and have a job description.

```
class apps.profiles.models.Student(*args, **kwargs)
    Bases: apps.profiles.models.Person
```

A Student is a Person that has a graduation year and home program.

Students need to be addressed with the utmost sensitivity and security, since we must follow FERPA guidelines and cannot divulge any more data than is absolutely necessary (i.e. directory information). See:

http://www2.ed.gov/policy/gen/guid/fpco/ferpa/mndirectoryinfo.html

```
class apps.profiles.models.Subject(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Subject typically represents a group of Course objects below a Program. Recent changes in the way courses are constructed, though, may require this simple relationship to be expanded somewhat. A Subject also contains the four-letter abbreviation that precedes a couse number in the course directories.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.UnitPermission(*args, **kwargs)
    Bases: django.db.models.base.Model
```

A UnitPermission object attaches itself to a user and another DataMYNE object, most suitably an organizational unit (e.g. Division, Program).

Unit permissions allow for an expanded authorization framework that goes beyond the stock permissions built into Django which are based solely on ContentType. For example, a user may:

- •have permission to change only Course objects
- •have permission to change only objects that falls under the Parsons Division

The effect of this is to create a matrix that constrains administrators to only edit certain kind of objects and only object that fall under their purview.

At the time of writing, this can be managed from within the admin tool by DataMYNE administrators. The administrator need to go to a unit's admin page (e.g. Parsons) and, under the Unit Permissions section, add only those users who are able to act on behalf of the unit (e.g. an operations manager for Parsons, a program director of Communication Design, etc.)

While this addresses the problem of how to restrict editorial permissions to both object (via Django's system) and unit, more work needs to be done on creating an effective set of admin interfaces that could allow the assignment of unit permissions by people within the university, rather than the rather rough way DataMYNE

administrators need to work now within the admin tool. This will become especially important as the system expands to cover the entire university.

content_object

Provides a generic relation to any object through content-type/object-id fields.

```
class apps.profiles.models.Work(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A Work represents any work of art or any other product/document/etc. created within the system. We do NOT associate these with a Person directly. Instead, these relationships are managed with the Affiliation class from the reporting application. The allows for many-to-many relationships, as well as providing subtle variations in the role, date of participation, etc.

affiliations

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.profiles.models.WorkURL(*args, **kwargs)
    Bases: apps.profiles.models.BaseModel
```

A WorkURL provides a URL associated with a persons work (e.g. portfolio links, etc.).

This should be deprecated in favor of the more flexible Link class.

unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

PROFILES: VIEWS

apps.profiles.views.accept invitation(request, *args, **kwargs)

If the user if logged in, this view simply redirects that user to the appropriate view and marks the invite as accepted.

This view requires that an object that can have an accepted invitation possess an accept_invitiation method.

apps.profiles.views.accept_organization_invitation(request, *args, **kwargs)

This view marks an invitation to an organization as accepted.

Note that this should be deprecated in favor of the more general accept_organization view, but requires that the Organization model have an accept_organization model built into it.

apps.profiles.views.activate(request, *args, **kwargs)

This is a deprecated method that preceded the move to LDAP authentication.

apps.profiles.views.add_syllabus(request, *args, **kwargs)

This view allows specific users the ability to upload a syllabus and attach it to the Section object.

apps.profiles.views.admin(request, *args, **kwargs)

Deprecated. A new and more complete admin section needs to be created to handle the move from DataMYNE as a Parsons-based experiment to university- wide infrastrucure.

apps.profiles.views.api (request)

Deprecated

apps.profiles.views.browse(request)

This is a deprecated view. It served primarily as the *browse* page, which has since been temporarily removed from the main nav pending a redesign.

apps.profiles.views.contact(request)

A simple contact-form processor.

apps.profiles.views.contact_student(request, person_id)

This view allows users to send students email without revealing the student's email address publicly.

There most likely should be a setting on the Student profile page which allows the student to disable this. At time of writing, this does not exist in either model or view code and should be considered.

apps.profiles.views.decline_invitation(request, *args, **kwargs)

If the user if logged in, this view simply redirects that user back to his or her previous view and deletes the invitation. The Invitation is one of the very few objects that get deleted in the DataMYNE system. In the future, it may prove useful to only "logically" delete these, but still retain the connection in order to mine more data on social dynamics.

apps.profiles.views.delete_work(request, work_id, person_id)

This view deletes a Work object. It is one of the few models that we allow to be publicly deleted. Since this is user-contributed content, however, it only seems fair that we respect their wishes about the display and use of their own work.

apps.profiles.views.download_syllabus(request, section_id)

This view generates a document based on the uploaded syllabus. It tries to create a name for the file that matches the university's guidelines for naming syllabus documents rather than defaulting to the user's file naming scheme.

apps.profiles.views.edit_course_profile(request, *args, **kwargs)

This view allows for the editing of courses on the public site. Like the Person profile views, it has both admin and non-admin versions, so be careful with that distinction. It also uses the unit permissions and Django permissions code. While simpler here than in other parts of the site (cf. edit_organization), the ability to edit is probably best determined with a object method written into the model and not in the view code, as this makes the permissions system overly brittle.

apps.profiles.views.edit_organization(request, *args, **kwargs)

This view edits an Organization object. See the model documentation for a more complete description of what an organization represents.

Along with the Committee model, organizations represent one of the most complicated objects in terms of security. This model should be refactored first as part of a general clean up to remove edittable from the view code and port it into the model code itself.

Also note the use of the current and past managers for the member and leader affiliations. This is one of the benefits of using the Affiliation object over a ManyToManyField: we can retain historical information even after the connection is no longer active. For example, we can know all of the previous leaders of an organization while still allowing the current ones to be the only recipients of security clearance, public display, etc.

In addition, the Affiliation managers have the begin and retire methods that allow connections to see easily set to current or past without having to rewrite complicated code. "Retirement" is the preferred way for disposing of a current affiliation. It has the same effect as a deletion, while still retaining the connections for historical and data-mining purposes.

apps.profiles.views.edit_person_profile (request, person_id)

This view serves to unify the FacultyMember, Student, and Staff profile edit views under a single edit view. Within the urls module, any person's role-specific profile editing page can be reached from here. This allows a common "gateway" to profiles editors without needing to decide, within the templates, which role a Person occupies.

This should be the destination for all profile edit requests going forward.

apps.profiles.views.edit profile (request, *args, **kwargs)

This is the profile edit view for FacultyMember objects. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the edit_person_profile view to reduce repetition.
- •edittable defines whether a user can edit this object. This really needs to be refactored out of the view code and into the model code, either at the level of FacultyMember or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •There are really two edit views: one for regular users and one for admins. Be sensitive to the distinction, since admins have access to many fields that we do not want users to be able to update (e.g. field provided by Banner, etc.)

apps.profiles.views.edit_section_profile(request, *args, **kwargs)

This view allows for the editing of sections on the public site. Like the Person profile views, it has both admin and non-admin versions, so be careful with that distinction. It also uses the unit permissions and Django permissions code. While simpler here than in other parts of the site (cf. edit_organization), the ability to edit is probably best determined with a object method written into the model and not in the view code, as this makes the permissions system overly brittle.

One important consideration for the editting permissions is that we allow assigned faculty to edit this page, as well as the usual administrators.

```
apps.profiles.views.edit_staff_profile(request, *args, **kwargs)
```

This is the profile edit view for Staff objects. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the edit_person_profile view to reduce repetition.
- •edittable defines whether a user can edit this object. This really needs to be refactored out of the view code and into the model code, either at the level of Staff or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •There are really two edit views: one for regular users and one for admins. Be sensitive to the distinction, since admins have access to many fields that we do not want users to be able to update (e.g. field provided by Banner, etc.)

```
apps.profiles.views.edit_student_profile(request, *args, **kwargs)
```

This is the profile edit view for Student objects. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the edit_person_profile view to reduce repetition.
- •edittable defines whether a user can edit this object. This really needs to be refactored out of the view code and into the model code, either at the level of Student or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •There are really two edit views: one for regular users and one for admins. Be sensitive to the distinction, since admins have access to many fields that we do not want users to be able to update (e.g. field provided by Banner, etc.)

```
apps.profiles.views.edit_work(request, *args, **kwargs)
```

This view edits a Work object and its affiliated creators.

As with other model views, this should be refactored to move the security code into the model itself rather than re-writing the "edittable" flag within the view code.

```
apps.profiles.views.filter(request)
```

This view has been deprecated since the introduction of new Student and Staff models. A more comprehensive browse/filter view is in the planning stages at the time of writing.

```
apps.profiles.views.home (request)
```

This is the home page of DataMYNE. It calls the _random_images function to generate a set of images that contain a mix of user profile images and work images.

```
apps.profiles.views.list_profiles(request, tag='')
```

This is a deprecated view. It served primarily as destination for tag links, but has since been temporarily removed in favor of a direct link to the search results for a tag.

apps.profiles.views.stats_report (request, *args, **kwargs)

Deprecated. A new admin (with stats) needs to be created.

apps.profiles.views.view_course(request, course_id)

This view displays the course. It's surprisingly simple, given how much work has been done with courses over time. In fact, a lot of the work of displaying the page appears on the template itself, for good or ill.

Like other simple model views, this view could benefit from being refactored so that the security logic exists in the Course model itself and not in the course view.

apps.profiles.views.view_invitation(request, *args, **kwargs)

If the user if logged in, this view simply redirects that user to the appropriate view and marks the invite as received.

apps.profiles.views.view_organization(request, organization_id)

This view displays an Organization object. See the model documentation for a more complete description of what an organization represents.

Along with the Committee model, organizations represent one of the most complicated objects in terms of security. This model should be refactored first as part of a general clean up to remove edittable from the view code and port it into the model code itself.

It would also be a good idea to add an "invite" permission that could allow members with fewer security privileges to still invite new members.

Also note the use of the current and past managers for the member and leader affiliations. This is one of the benefits of using the Affiliation object over a ManyToManyField: we can retain historical information even after the connection is no longer active. For example, we can know all of the previous leaders of an organization while still allowing the current ones to be the only recipients of security clearance, public display, etc.

apps.profiles.views.view_person_profile (request, person_id)

This view serves to unify the FacultyMember, Student, and Staff profile views under a single view. Within the urls module, any person's role-specific profile can be reached from here. This allows a common "gateway" to profiles without needing to decide, within the templates, which role a Person occupies.

This should be the destination for all profile requests going forward.

apps.profiles.views.view_profile(request, person_id)

This is the profile view for FacultyMembers. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the view_person_profile view to reduce repetition.
- •edittable defines whether the Edit button appears. This really needs to be refactored out of the view code and into the model code, either at the level of FacultyMember or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •mlt refers to the more_like_this method available in haystack (and, in turn, Solr). It produces what appears to be a fairly interesting list of related documents (i.e. other DataMYNE objects with sufficient document similarity). However, this could be improved with a faceted search. For example, perhaps only other people and/or works are shown, but not courses or committees. Further user testing is necessary to determine this.
- •OpenCalais code exists here which updates the OpenCalais objects in the background. The OC code is still experimental within DataMYNE and should probably either be removed or made subject to a debug setting.

apps.profiles.views.view program (request, program id)

This view is more or less a stub of pag for displaying the Program organizational unit. Ultimately, this should be a place where admins and other authorized users can go to work with program-related functions, like managing Committee and Authority relationships, etc. Other org units should probably get similar pages.

apps.profiles.views.view_project_profile(request, project_id)

This view, and its associated Project model, is deprecated and should be refactored out.

apps.profiles.views.view_section(request, section_id)

This view displays a Section of a Course (see the model documentation for a complete description of the distinction between the two.)

This view is notable as being one of the places in which the object-based permissions are used. Object-based permissions are applied at the level of a specific object – in this case, whether the user is allowed to read the syllabus of a specific instructor.

As with other view, the edittable flag here would best be refactored into the model code itself rather than remain in the view.

apps.profiles.views.view_staff_profile(request, person_id)

This is the profile view for Staff objects. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the view_person_profile view to reduce repetition.
- •edittable defines whether the Edit button appears. This really needs to be refactored out of the view code and into the model code, either at the level of Staff or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •mlt refers to the more_like_this method available in haystack (and, in turn, Solr). It produces what appears to be a fairly interesting list of related documents (i.e. other DataMYNE objects with sufficient document similarity). However, this could be improved with a faceted search. For example, perhaps only other people and/or works are shown, but not courses or committees. Further user testing is necessary to determine this.
- •OpenCalais code exists here which updates the OpenCalais objects in the background. The OC code is still experimental within DataMYNE and should probably either be removed or made subject to a debug setting.

apps.profiles.views.view student profile (request, person id)

This is the profile view for Student objects. Its function is pretty straightforward, but there are some tricky areas:

- •much of this code is similar to other Person objects. This could be refactored into the view person profile view to reduce repetition.
- •edittable defines whether the Edit button appears. This really needs to be refactored out of the view code and into the model code, either at the level of Student or, at least in part, at the level of Person itself. The reason for this is that the combination of Django permissions and unit permissions is becoming increasingly brittle. Unifying this with a well-written object method would improve security, reusability, and performance.
- •mlt refers to the more_like_this method available in haystack (and, in turn, Solr). It produces what appears to be a fairly interesting list of related documents (i.e. other DataMYNE objects with sufficient document similarity). However, this could be improved with a faceted search. For example, perhaps only other people and/or works are shown, but not courses or committees. Further user testing is necessary to determine this.

•OpenCalais code exists here which updates the OpenCalais objects in the background. The OC code is still experimental within DataMYNE and should probably either be removed or made subject to a debug setting.

apps.profiles.views.view_work (request, work_id)

This view displays a Work object and its affiliated creators.

apps.profiles.views.wordpress(request, faculty_id)

PROFILES: FIELDS

Created on Apr 27, 2011

@author: Mike_Edwards

class apps.profiles.fields.DataMyneSplitDateTimeField(*args, **kwargs)

Bases: django.forms.fields.MultiValueField

based on: http://copiesofcopies.org/webl/2010/04/26/a-better-datetime-widget-for-django/

This field allows for split date/time form entries with ajax-powered widgets

compress (data_list)

Takes the values from the MultiWidget and passes them as a list to this function. This function needs to compress the list into a single object to save.

widget

alias of ${\tt DataMyneSplitDateTimeWidget}$

PROFILES: FORMS

class Meta

model

alias of Course

AdminCourseForm.media

 $Bases: \verb"django.forms.models.ModelForm"$

class Meta

model

alias of FacultyMember

AdminFacultyForm.clean_bio()

AdminFacultyForm.clean_expertise()

AdminFacultyForm.media

 $Bases: \verb|django.forms.models.ModelForm||\\$

class Meta

model

alias of Section

AdminSectionForm.media

```
class apps.profiles.forms.AdminStaffForm(data=None, files=None, auto_id='id_%s', pre-
                                                fix=None,
                                                            initial=None.
                                                                           error class=<class
                                                'django.forms.util.ErrorList'>,
                                                                              label suffix=':',
                                                empty_permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Staff
     AdminStaffForm.clean_bio()
     AdminStaffForm.clean_expertise()
     AdminStaffForm.media
class apps.profiles.forms.AdminStudentForm(data=None, files=None, auto id='id %s', pre-
                                                  fix=None, initial=None, error_class=<class
                                                   'django.forms.util.ErrorList'>, label_suffix=':',
                                                  empty_permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Student
     AdminStudentForm.clean_bio()
     AdminStudentForm.clean_expertise()
     AdminStudentForm.media
class apps.profiles.forms.ContactForm(data=None,
                                                         files=None,
                                                                      auto id='id %s',
                                            fix=None,
                                                          initial=None,
                                                                           error_class=<class
                                            'django.forms.util.ErrorList'>,
                                                                              label_suffix=':',
                                            empty permitted=False)
     Bases: django.forms.forms.Form
     media
                                                                                  files=None,
class apps.profiles.forms.ContactStudentForm (data=None,
                                                                         prefix=None,
                                                     auto_id='id_%s',
                                                                                         ini-
                                                     tial=None,
                                                                           error_class=<class
                                                     'django.forms.util.ErrorList'>,
                                                                                         la-
                                                     bel_suffix=':', empty_permitted=False)
     Bases: django.forms.forms.Form
     media
class apps.profiles.forms.CourseForm(data=None,
                                                        files=None,
                                                                      auto id='id %s',
                                                         initial=None,
                                          fix=None,
                                                                           error_class=<class
                                           'django.forms.util.ErrorList'>,
                                                                              label_suffix=':',
                                           empty_permitted=False, instance=None)
     Bases: \verb"apps.profiles.forms.AdminCourseForm"
     class Meta
         Bases: apps.profiles.forms.Meta
     CourseForm.media
```

```
class apps.profiles.forms.FacultyForm (data=None,
                                                          files=None,
                                                                        auto id='id %s',
                                                           initial=None.
                                             fix=None,
                                                                             error class=<class
                                                                                label suffix=':',
                                             'django.forms.util.ErrorList'>,
                                             empty permitted=False, instance=None)
     Bases: apps.profiles.forms.AdminFacultyForm
     class Meta
          Bases: apps.profiles.forms.Meta
     FacultyForm.media
class apps.profiles.forms.FilterForm(data=None,
                                                         files=None,
                                                                       auto id='id %s',
                                           fix=None,
                                                           initial=None,
                                                                             error_class=<class
                                            'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                            empty_permitted=False)
     Bases: django.forms.forms.Form
     media
class apps.profiles.forms.InvitationForm(data=None, files=None, auto id='id %s', pre-
                                                             initial=None,
                                                 fix=None,
                                                                             error class=<class
                                                 'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                                 empty_permitted=False)
     Bases: django.forms.forms.Form
     media
class apps.profiles.forms.OrganizationForm(data=None, files=None, auto_id='id_%s', pre-
                                                   fix=None, initial=None, error class=<class
                                                    'django.forms.util.ErrorList'>, label suffix=':',
                                                   empty permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Organization
     OrganizationForm.media
class apps.profiles.forms.PersonActivateForm(data=None,
                                                                                    files=None,
                                                                          prefix=None.
                                                      auto_id='id_%s',
                                                                                           ini-
                                                      tial=None,
                                                                             error class=<class
                                                      'django.forms.util.ErrorList'>,
                                                                                           la-
                                                      bel suffix=':', empty permitted=False)
     Bases: django.forms.forms.Form
     media
class apps.profiles.forms.SearchForm(data=None,
                                                         files=None,
                                                                       auto_id='id_%s',
                                                                                          pre-
                                                           initial=None,
                                           fix=None,
                                                                             error_class=<class
                                            'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                            empty_permitted=False)
     Bases: django.forms.forms.Form
     media
class apps.profiles.forms.SectionForm (data=None,
                                                          files=None.
                                                                        auto id='id %s',
                                                           initial=None,
                                             fix=None,
                                                                             error_class=<class
                                             'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                             empty_permitted=False, instance=None)
     Bases: apps.profiles.forms.AdminSectionForm
```

```
class Meta (data=None, files=None, auto_id='id_%s', prefix=None, initial=None, error_class=<class
                'django.forms.util.ErrorList'>, label_suffix=':', empty_permitted=False, instance=None)
          Bases: apps.profiles.forms.AdminSectionForm
          media
     SectionForm.media
class apps.profiles.forms.StaffForm(data=None,
                                                         files=None,
                                                                       auto_id='id_%s',
                                                                                          pre-
                                                          initial=None,
                                                                             error_class=<class
                                                                                label_suffix=':',
                                           'django.forms.util.ErrorList'>,
                                          empty permitted=False, instance=None)
     Bases: apps.profiles.forms.AdminStaffForm
     class Meta
          Bases: apps.profiles.forms.Meta
     StaffForm.media
class apps.profiles.forms.StudentForm (data=None,
                                                          files=None,
                                                                        auto id='id %s',
                                             fix=None.
                                                           initial=None.
                                                                             error class=<class
                                             'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                             empty permitted=False, instance=None)
     Bases: apps.profiles.forms.AdminStudentForm
     class Meta
          Bases: apps.profiles.forms.Meta
     StudentForm.media
class apps.profiles.forms.SyllabusForm(data=None,
                                                           files=None,
                                                                        auto id='id %s', pre-
                                              fix=None.
                                                            initial=None.
                                                                             error class=<class
                                               'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                              empty_permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
          model
             alias of Section
     SyllabusForm.media
class apps.profiles.forms.WorkForm(data=None,
                                                        files=None,
                                                                       auto id='id %s',
                                         fix=None,
                                                          initial=None,
                                                                             error class=<class
                                         'django.forms.util.ErrorList'>.
                                                                                label suffix=':',
                                         empty permitted=False, instance=None)
     Bases: django.forms.models.Modelform
     class Meta
         model
             alias of Work
     WorkForm.media
class apps.profiles.forms.WorkURLForm(data=None,
                                                          files=None,
                                                                        auto_id='id_%s',
                                             fix=None,
                                                           initial=None,
                                                                             error class=<class
                                             'django.forms.util.ErrorList'>,
                                                                                label_suffix=':',
                                             empty permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
```

class Meta

model

alias of WorkURL

WorkURLForm.media

PROFILES: HANDLERS

```
Created on Aug 18, 2010
@author: edwards
class apps.profiles.handlers.CourseHandler
     Bases: piston.handler.BaseHandler
     This handler returns courses.
     model
         alias of Course
     queryset (request)
class apps.profiles.handlers.ExpertiseHandler
     Bases: piston.handler.BaseHandler
     This handler returns areas of expertise.
     model
         alias of Expertise
     queryset (request)
class apps.profiles.handlers.FacultyHandler
     Bases: piston.handler.BaseHandler
     This handler returns faculty members.
     model
         alias of FacultyMember
     queryset (request)
class apps.profiles.handlers.FacultyResultHandler
     Bases: apps.profiles.handlers.ResultHandler
     This ResultHandler allows for searches to be faceted to just return the faculty members within a search
     result set.
     read (request, model=None, *args, **kwargs)
class apps.profiles.handlers.OrganizationHandler
     Bases: piston.handler.BaseHandler
     This handler returns organizations.
     model
         alias of Organization
```

```
queryset (request)
class apps.profiles.handlers.PersonHandler
     Bases: piston.handler.BaseHandler
     This handler is a generic handler for all people. It's most useful in queries like with affiliations where people of
     multiple roles could be returned (e.g. FacultyMember, Student, Staff)
     mode1
         alias of Person
     queryset (request)
class apps.profiles.handlers.ProjectHandler
     Bases: piston.handler.BaseHandler
     model
         alias of Project
     queryset (request)
class apps.profiles.handlers.RecentFacultyHandler
     Bases: apps.profiles.handlers.FacultyHandler
     This handler returns the 50 most recently updated faculty members.
     queryset (request)
class apps.profiles.handlers.RecentStudentHandler
     Bases: apps.profiles.handlers.StudentHandler
     This handler returns the 50 most recently updated students.
     queryset (request)
class apps.profiles.handlers.RecentWorkHandler
     Bases: apps.profiles.handlers.WorkHandler
     This handler returns the 50 most recently updated works.
     queryset (request)
class apps.profiles.handlers.ResultHandler
     Bases: piston.handler.BaseHandler
     This handler is unique in that is uses a SearchQuerySet from haystack rather than the typical Django
     QuerySet. This requires a bit of customization with the read output, but allows us to treat haystack search
     results the same way as any other set coming out of the piston API application.
     convert search queryset (queryset, mlt=False)
     mode1
         alias of SearchResult
     read (request, model=None, *args, **kwargs)
class apps.profiles.handlers.StudentHandler
     Bases: piston.handler.BaseHandler
     This handler returns students.
     model
         alias of Student
     queryset (request)
```

class apps.profiles.handlers.StudentResultHandler Bases: apps.profiles.handlers.ResultHandler This Result Handler allows for searches to be faceted to just return the students within a search result set. read (request, model=None, *args, **kwargs) class apps.profiles.handlers.TagHandler Bases: piston.handler.BaseHandler This handler returns tags. model alias of Tag class apps.profiles.handlers.TaggedPersonHandler Bases: piston.handler.BaseHandler This handler returns tagged items, but restricts the results to Student and FacultyMember objects. model alias of TaggedItem queryset (request) class apps.profiles.handlers.TaggedWorkHandler Bases: piston.handler.BaseHandler This handler returns tagged items, but restricts the results to Work objects. model alias of TaggedItem queryset (request) class apps.profiles.handlers.WorkHandler Bases: piston.handler.BaseHandler This handler returns works. model alias of Work class apps.profiles.handlers.WorkResultHandler Bases: apps.profiles.handlers.ResultHandler This ResultHandler allows for searches to be faceted to just return the works within a search result set. read (request, model=None, *args, **kwargs)

PROFILES: LOOKUPS

```
class apps.profiles.lookups.CourseLookup
     Bases: object
     This lookup pulls in Course objects to complete ajax-powered form fields.
     format item(course)
     format_result (course)
     get_objects(ids)
     get_query (q, request)
class apps.profiles.lookups.DepartmentLookup
     Bases: object
     This lookup pulls in Department objects to complete ajax-powered form fields.
     format_item(object)
     format_result (object)
     get_objects(ids)
     get_query (q, request)
class apps.profiles.lookups.DivisionLookup
     Bases: object
     This lookup pulls in Division objects to complete ajax-powered form fields.
     format_item(object)
     format_result (object)
     get_objects(ids)
     get_query (q, request)
class apps.profiles.lookups.PersonLookup
     Bases: object
     This lookup pulls in Person objects to complete ajax-powered form fields.
     format_item (person)
     format_result (person)
     get_objects(ids)
     get_query (q, request)
```

```
class apps.profiles.lookups.ProgramLookup
     Bases: object
     This lookup pulls in Program objects to complete ajax-powered form fields.
     format_item(object)
     format_result (object)
     get_objects(ids)
     get_query (q, request)
class apps.profiles.lookups.SchoolLookup
     Bases: object
     This lookup pulls in School objects to complete ajax-powered form fields.
     format_item(object)
     format_result (object)
     get_objects(ids)
     get_query (q, request)
class apps.profiles.lookups.WorkLookup
     Bases: object
     This lookup pulls in Work objects to complete ajax-powered form fields.
     format_item(object)
     format\_result(object)
     get_objects(ids)
     get_query (q, request)
```

PROFILES: BACKENDS

Created on Mar 2, 2011

@author: edwards

class apps.profiles.backends.EmailModelBackend

Bases: django.contrib.auth.backends.ModelBackend

Authenticates against django.contrib.auth.models.User. This is an older backend whose use preceded the NewSchoolLDAPBackend authentication.

authenticate (username=None, password=None)

class apps.profiles.backends.NewSchoolLDAPBackend

Bases: django_auth_ldap.backend.LDAPBackend

This is the LDAP authentication for New School faculty, students and staff. At present, it does its best to figure out whether a new person is one of the three roles contained in the system. In the future, we will need to find ways to create hybrid profiles for users who occupy multiple roles.

To look into the LDAP itself, you can use the following commands (replace the example text with actual values)

- >>> import ldap
- >>> conn = ldap.initialize("ldaps://your.ldap.server.edu")
- >>> conn.bind_s("cn=commonLoginName,o=organization","password",ldap.AUTH_SIMPLE)
- >>> conn.search_s("o=organization",ldap.SCOPE_SUBTREE, "(&(objectclass=user)(sn=Lastname)(givenN

get_or_create_user (username, ldap_user)

REPORTING: MODELS

```
class apps.reporting.models.Affiliation(*args, **kwargs)
    Bases: datamining.apps.profiles.models.BaseModel
```

The Affiliation objects are both useful and pervasive in the current DataMYNE system. In almost all cases, they have superseded the use of the ManyToManyField for the "Person" to other objects relationships. They have the following advantages:

- •They are generic. This means we do not need to redefine the relationship field on every new object we make. Instead, we can assume that **any** new model will be able to form a many-to-many relationship to a person via an Affiliation.
- •They have a Role. We can therefore create several different kinds of relationships between a Person and an object. For example, a Committee can have both a chairperson and a member.
- •They have a start and end date. This allows us to maintain old relationships, and embargo new relationships, without have to delete links. This is useful historically and for data-mining purposes. For example, we can create a history of all of a Committee's chairs as far back as we like.
 - -The use of the begin and retire methods is encouraged in maintaining current and past affiliations. An embargo method would probably also be useful for maintaining future affiliations (e.g. an incoming committee chair.)

exception DoesNotExist

```
Bases: django.core.exceptions.ObjectDoesNotExist
exception Affiliation.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned
Affiliation.begin()
Affiliation.content_object
    Provides a generic relation to any object through content-type/object-id fields.
Affiliation.content_type
Affiliation.created_by
Affiliation.get_next_by_created_at(*moreargs, **morekwargs)
Affiliation.get_next_by_updated_at(*moreargs, **morekwargs)
Affiliation.get_previous_by_created_at(*moreargs, **morekwargs)
Affiliation.get_previous_by_updated_at(*moreargs, **morekwargs)
Affiliation.person
Affiliation.retire()
```

```
Affiliation.role
     Affiliation.unit permissions
          This class provides the functionality that makes the related-object managers available as attributes on a
          model class, for fields that have multiple "remote" values and have a GenericRelation defined in their
          model (rather than having another model pointed at them). In the example "article.publications", the
          publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.
class apps.reporting.models.AffiliationCurrentManager
     Bases: django.db.models.manager.Manager
     This manager show affiliations that exist between two dates OR without any dates OR where there is a previous
     start but not an end OR where there is no start date but a future end date.
     This affiliation manager, like all the others, allows for affiliations to be begun or retired en masse.
     begin_all (role, content_type, object_id)
     get_query_set()
     retire_all (role, content_type, object_id)
class apps.reporting.models.AffiliationFutureManager
     Bases: apps.reporting.models.AffiliationCurrentManager
     This manager only lists affiliations whose start date is in the future.
     get_query_set()
class apps.reporting.models.AffiliationPastManager
     Bases: apps.reporting.models.AffiliationCurrentManager
     This manager only lists affiliations whose end date is in the past.
     get_query_set()
class apps.reporting.models.Authority(*args, **kwargs)
     Bases: datamining.apps.profiles.models.BaseModel
     An Authority defines the control of a committee by an organizational unit within the university (e.g. a
     Division).
     exception DoesNotExist
          Bases: django.core.exceptions.ObjectDoesNotExist
     exception Authority.MultipleObjectsReturned
          Bases: django.core.exceptions.MultipleObjectsReturned
     Authority.committee
     Authority.content_object
          Provides a generic relation to any object through content-type/object-id fields.
     Authority.content_type
     Authority.created_by
     Authority.get_next_by_created_at(*moreargs, **morekwargs)
```

Authority.get_next_by_updated_at(*moreargs, **morekwargs)

Authority.get_previous_by_created_at(*moreargs, **morekwargs)
Authority.get_previous_by_updated_at(*moreargs, **morekwargs)

Authority.unit permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.reporting.models.Committee(*args, **kwargs)
    Bases: datamining.apps.profiles.models.BaseModel
```

A Committee is an official designated group of people who have a mandate and who presumably meet regularly. A committee may have a parent committee to which it reports. It is more structured than an Organization and is attached to organization units such as Division or Program via the Authority objects.

exception DoesNotExist

Bases: django.core.exceptions.ObjectDoesNotExist

exception Committee.MultipleObjectsReturned

Bases: django.core.exceptions.MultipleObjectsReturned

Committee.accept invitation (invitation)

Committee.affiliations

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
Committee.authorities

Committee.created_by

Committee.get_absolute_url(*moreargs, **morekwargs)

Committee.get_next_by_created_at(*moreargs, **morekwargs)

Committee.get_next_by_updated_at(*moreargs, **morekwargs)

Committee.get_previous_by_created_at(*moreargs, **morekwargs)

Committee.get_previous_by_updated_at(*moreargs, **morekwargs)

Committee.get_unit()

Committee.meetings
```

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
Committee.parent
Committee.subcommittees
Committee.unit_permissions
```

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
class apps.reporting.models.Meeting(*args, **kwargs)
    Bases: datamining.apps.profiles.models.BaseModel
```

A Meeting generically connects itself to any other object. This allows other models like Committee and Organization to use the same meeting code.

exception DoesNotExist

Bases: django.core.exceptions.ObjectDoesNotExist

exception Meeting.MultipleObjectsReturned

Bases: django.core.exceptions.MultipleObjectsReturned

Meeting.accept_invitation(invitation)

Meeting.content_object

Provides a generic relation to any object through content-type/object-id fields.

Meeting.content_type

Meeting.created_by

Meeting.get_absolute_url(*moreargs, **morekwargs)

Meeting.get_next_by_created_at(*moreargs, **morekwargs)

Meeting.get next by end time (*moreargs, **morekwargs)

Meeting.get_next_by_start_time(*moreargs, **morekwargs)

Meeting.get_next_by_updated_at(*moreargs, **morekwargs)

Meeting.get_previous_by_created_at (*moreargs, **morekwargs)

Meeting.get_previous_by_end_time(*moreargs, **morekwargs)

Meeting.get_previous_by_start_time(*moreargs, **morekwargs)

Meeting.get_previous_by_updated_at(*moreargs, **morekwargs)

Meeting.unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

class apps.reporting.models.MeetingManager

Bases: django.db.models.manager.Manager

daily occurrences (dt=None, content type=None, object id=None)

Returns a queryset of for instances that have any overlap with a particular day.

- •dt may be either a datetime.datetime, datetime.date object, or None. If None, default to the current day.
- •event can be an Event instance for further filtering.

monthly_occurrences (dt=None, content_type=None, object_id=None)

Returns a queryset of for instances that have any overlap with a particular day.

- •dt may be either a datetime.datetime, datetime.date object, or None. If None, default to the current day.
- •event can be an Event instance for further filtering.

```
range_occurences (start=None, end=None, content_type=None, object_id=None)
```

weekly_occurrences (dt=None, content_type=None, object_id=None)

Returns a queryset of for instances that have any overlap with a particular day.

- •dt may be either a datetime.datetime, datetime.date object, or None. If None, default to the current day.
- •event can be an Event instance for further filtering.

```
class apps.reporting.models.Role(*args, **kwargs)
```

Bases: datamining.apps.profiles.models.BaseModel

A Role is a refinement of Affiliation between a Person and another object. A roles has:

- **title** A role's title is simply that. Good examples include "creator," as in "Jane Doe is the creator of Artwork X" and "chairperson," as in "John Does is the chairperson of Committee ABC"
- **content_type** A role must also have a content type. This allows for there to be a distinct "member" role, for example, in affiliations to both a Committee and an Organization.

exception DoesNotExist

Bases: django.core.exceptions.ObjectDoesNotExist

exception Role.MultipleObjectsReturned

Bases: django.core.exceptions.MultipleObjectsReturned

```
Role.affiliations
```

Role.content_type

Role.created by

```
Role.get_next_by_created_at (*moreargs, **morekwargs)
```

Role.get_next_by_updated_at (*moreargs, **morekwargs)

Role.get_previous_by_created_at(*moreargs, **morekwargs)

Role.get_previous_by_updated_at(*moreargs, **morekwargs)

Role.unit_permissions

This class provides the functionality that makes the related-object managers available as attributes on a model class, for fields that have multiple "remote" values and have a GenericRelation defined in their model (rather than having another model pointed *at* them). In the example "article.publications", the publications attribute is a ReverseGenericRelatedObjectsDescriptor instance.

```
apps.reporting.models.delete_area_of_study_affiliations (sender, *args, **kwargs)
apps.reporting.models.delete_committee_affiliations (sender, *args, **kwargs)
apps.reporting.models.delete_committee_meetings (sender, *args, **kwargs)
apps.reporting.models.delete_department_authorities (sender, *args, **kwargs)
apps.reporting.models.delete_division_authorities (sender, *args, **kwargs)
apps.reporting.models.delete_organization_affiliations (sender, *args, **kwargs)
apps.reporting.models.delete_organization_meetings (sender, *args, **kwargs)
apps.reporting.models.delete_program_affiliations (sender, *args, **kwargs)
apps.reporting.models.delete_program_authorities (sender, *args, **kwargs)
apps.reporting.models.delete_school_authorities (sender, *args, **kwargs)
apps.reporting.models.index_committee (sender, *args, **kwargs)
apps.reporting.models.index_meeting (sender, *args, **kwargs)
```

REPORTING: VIEWS

apps.reporting.views.edit_committee(request, *args, **kwargs)

This view edits a Committee object. See the model documentation for a more complete description of what an organization represents.

Along with the Organization model, committees represent one of the most complicated objects in terms of security. This model should be refactored first as part of a general clean up to remove edittable from the view code and port it into the model code itself.

Also note the use of the current and past managers for the member and chairperson affiliations. This is one of the benefits of using the Affiliation object over a ManyToManyField: we can retain historical information even after the connection is no longer active. For example, we can know all of the previous chairs of a committee while still allowing the current ones to be the only recipients of security clearance, public display, etc.

In addition, the Affiliation managers have the begin and retire methods that allow connections to see easily set to current or past without having to rewrite complicated code. "Retirement" is the preferred way for disposing of a current affiliation. It has the same effect as a deletion, while still retaining the connections for historical and data-mining purposes.

apps.reporting.views.edit_meeting(request, *args, **kwargs)
This view edits a meeting.

Note that meetings, currently, can be attached to any object, specifically the Organization and Committee objects. This creates a rather complex security situation, in that the Meeting mode is not only capable of having permissions assigned to it directly but, logically, is also subject to the admin permissions for the Organization and Committee. As with other models, this should be refactored, to as great an extent as possible, into the models themselves.

apps.reporting.views.list_committees_by_school(request)

This view lists all of the committees of all the schools.

apps.reporting.views.view_committee(request, committee_id)

This view displays an Committee object. See the model documentation for a more complete description of what an organization represents.

Along with the Organization model, committees represent one of the most complicated objects in terms of security. This model should be refactored first as part of a general clean up to remove edittable from the view code and port it into the model code itself.

It would be good to add a "admin" role to the committees, in addition to the current "chairperson" and "member" roles.

Also note the use of the current and past managers for the member and chairperson affiliations. This is one of the benefits of using the Affiliation object over a ManyToManyField: we can retain historical information even after the connection is no longer active. For example, we can know all of the previous chairs of

a committee while still allowing the current ones to be the only recipients of security clearance, public display, etc.

apps.reporting.views.view_meeting(request, meeting_id)
This view displays a meeting.

Note that meetings, currently, can be attached to any object, specifically the Organization and Committee objects. This creates a rather complex security situation, in that the Meeting mode is not only capable of having permissions assigned to it directly but, logically, is also subject to the admin permissions for the Organization and Committee. As with other models, this should be refactored, to as great an extent as possible, into the models themselves.

REPORTING: FORMS

```
Created on Apr 7, 2011
@author: Mike_Edwards
class apps.reporting.forms.CommitteeAffiliationForm(data=None,
                                                                                   files=None,
                                                              auto id='id %s',
                                                                                 prefix=None,
                                                              initial=None, error_class=<class
                                                              'django.forms.util.ErrorList'>,
                                                              label_suffix=':',
                                                              empty_permitted=False,
                                                                                          in-
                                                              stance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Affiliation
     CommitteeAffiliationForm.media
class apps.reporting.forms.CommitteeForm(data=None, files=None, auto_id='id_%s', pre-
                                                            initial=None,
                                                                            error_class=<class
                                                fix=None,
                                                 'django.forms.util.ErrorList'>,
                                                                               label_suffix=':',
                                                empty_permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Committee
     CommitteeForm.media
class apps.reporting.forms.MeetingForm(data=None,
                                                          files=None,
                                                                       auto_id='id_%s', pre-
                                             fix=None,
                                                           initial=None,
                                                                            error_class=<class
                                              'django.forms.util.ErrorList'>,
                                                                               label_suffix=':',
                                              empty_permitted=False, instance=None)
     Bases: django.forms.models.ModelForm
     class Meta
         model
             alias of Meeting
```

MeetingForm.media

REPORTING: HANDLERS

```
Created on Aug 18, 2010

@author: edwards

class apps.reporting.handlers.CommitteeHandler
    Bases: piston.handler.BaseHandler

This handler returns committees.

model
    alias of Committee

queryset (request)

class apps.reporting.handlers.StaffHandler
    Bases: piston.handler.BaseHandler

This handler returns staff members.

model
    alias of Staff

queryset (request)
```

CHAPTER

TWELVE

MOBILE: VIEWS

apps.mobile.views.home(request)

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