Preflib 2.0

Simon Rey, Nick Mattei

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Contents

1 Folder Structure

The folder structure of the project follows that of a typical Django project with one application. In the following we will go through the important files.

- preflib
    - settings.py: all the inner settings of the project, only change things there if you know what you're doing.
    - urls.py: general patterns for URL, since there only is one application the file is quite basic. Handlers for errors (500, 404, ...) also are defined there.
    - wsgi.py: used to link django to the http server, do not modify.

- preflibApp
    - management/commands
        * adddataset.py: management command used to add a dataset to the database.
        * createmetadata.py: command to generate all the metadata for the datafile in the database.
        * generatezip.py: generates all the zip files.
        * initializedb.py: command to be run when setting up the website.
        * updatepapers.py: update the list of the papers using Preflib according the a bib file.
    - migrations: inner Django stuff, do not modify.
    - preflibtools: nothing to do with Django, all the tools used to deal with the data.
    - static: all the static files that are served by the website.
    - templates: a template is an html file which can incorporate some Django code to perform some computations in it. This folder contains the general html structure of the website, i.e., all its templates.
    - templatetags: custom tags that can be used in the templates.
    - admin.py: define which tables can be accessed on the Django admin page of the website.
    - apps.py: inner Django stuff, do not modify.

- choices.py: several fields in the database have to be selected among a specific list. All the lists that are not worth putting in the database (because they never change for instance) are defined here.
- forms.py: the Django representation of the html forms that are used in the website. It is for instance, the login form, some administrative forms...
- models.py: all Danjgo objects representing the tables in the database. This is an important file that describes the entire database structure.
- scripts.py: some useful scripts, mainly used for management purposes.
- urls.py: the URL pattern for the pages available through this app.
- views.py: the most important file. The views are functions that are called to render the page requested by the user. This is where all the computations that are done at runtime are described.

- manage.py: Python file to run local functions

2 Database Structure

In the following, we provide more details about the structure of the database behind Preflib.

Let us first go through all the tables present in the database.

DATAFILE The most fundamental entity for Preflib is the datafile. The DATAFILE table contains a reference to all the datafiles that are in Preflib. The table does not contain the data in itself—it is stored in a file and not in the database—but all the relevant information about it: some basic details and datapatch in which the file is.

DATAPATCH The datapatch is the first level of classification of the datafile. It contains several datafile of different datatype. All the datafiles are based on the same preferences but the representation, the datatype, is different.

DATASET A dataset is a collection of datapatches. The datapatches will typically represent different years of the same election.

DATAPROPERTY A dataproperty is an additional information about a given datafile. It can have to do about the general properties of the data (number of candidates...) or about some more specific structure of the data (single-peakedness...).

METADATA The METADATA table stores all the different metadata available in the system. Their values are in the DATAPROPERTY table.

PAPER This table stores the information about the papers which are using Preflib.

USERPROFILE All the informations about the users that are not in the Django User class are present in this table.

Log Logs of what is happening in the inside are gathers in this table.

The following figure summarizes the links between the different tables and presents all the elements present in the tables.

DataSet	
name	Name of the dataset
abbreviation	Abbreviation of the dataset
extension	Extension of the dataset
seriesNumber	Series number of the dataset
description	Few sentences about the dataset
requiredCitations	Papers to cite when using the dataset
selectedStudies	Works related to the dataset
publicationDate	Date at which the dataset has been added
modificationDate	Last time the dataset has been modified

Metadata	
name	Name of the metadata
category	Category of the metadata
description	Description of the metadata
isActive	Should the metadata be displayed
innerModule	Python module to compute the metadata
innerFunction	Python function to compute the metadata
innerType	Python type of the metadata
searchWidget	Widget to use in the search page

DataPatch	
dataSet	Foreign key on the dataset
name	Name of the datapatch
description	Description of the datapatch
seriesNumber	Series number of the datapatch
publicationDate	Date at which the datapatch has been added
modificationDate	Last time the datapatch has been modified

DataProperty	
dataFile	Foreign key on the datafile
metadata	Foreign key on the metadata
value	Value of the property

DataFile	
dataPatch	Foreign key on the datapatch
dataType	Type of the datafile
modificationType	Modificaton type of the datafile
fileName	Name of the file
fileSize	Size of the file
publicationDate	Date at which the datafile has been added
modificationDate	Last time the datafile has been modified

Paper	
name	Identifier of the paper
title	Title of the paper
authors	Authors of the paper
publisher	Journal, conference... of the publication
year	Year of publication
url	Link to the paper
publicationDate	Date at which the paper has been added

UserProfile	
user	Foreign key on the Django user
firstname	First name of the user
lastname	Last name of the user
email	Email of the user
affiliation	Affiliation of the user
personnalURL	Link to the user's personnal page

Log	
log	Content of the log
logType	Type of log
logNum	Number of log of the given type
publicationDate	Date at which the paper has been added