Data File Specification

Each data file must be UTF-8 encoded. Each line must contain one JSON object. Objects are not permitted to span multiple lines. Each line describes one object.

The first line of the file is to treated as a header, and contains information about the document itself, including but not limited to the following:

- *terms* - a list containing all the academic terms included in the document
- *google_group* - a google group that you can join to be notified of updates to this specification
- *readme* - the url of this file you are reading right now
- *disclaimer* - a disclaimer about the export file
    - The data this application is based on derive from Brandeis University, however the University makes no claim or representation as to the accuracy of the data as presented by this application.

All subsequent objects have the following fields in common:

- *type* - the type of the object (one of requirement, instructor, term, subject, course, section)
- *id* - a unique identifier for that object, used to link it to other objects and to make updates to it later
- *comment* (optional) - a comment describing the change being made to the object

The technical specifications for the objects are as follows:

Each object must have a key called "type" whose value determines the rest of the requirements:

requirement

an academic requirement that a course can fulfill

example:

{"short":"FL", "long":"Foreign Language Requirement", "id":"FL", "type":"requirement"}

must be a map with the following keys (extra values prohibited):

type
: must be requirement

id - a unique identifier for this requirement
: must be a valid UTF-8 string 1-255 bytes long

comment (optional) - a comment relating to this particular update
: must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

long - the full name of the requirement, such as Physical Education
: must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

short - the abbreviated name of the requirement, such as PE
: must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

instructor

a person who provides instruction for one or more course sections

example:

{"middle":"Dembitz", "email":"noreply@brandeis.edu", "first":"Louis", "last":"Brandeis", "id":"9990090099", "type":"instructor"}

must be a map with the following keys (extra values prohibited):

type
: must be instructor

id - a unique identifier for this instructor
: must be a valid UTF-8 string 1-255 bytes long

comment (optional) - a comment relating to this particular update
: must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

email - the instructor's email address
: (may be null) must meet the following conditions:

    - must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
    - must be a valid email address

first - the instructor's first name
: (may be null) must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

middle - the instructor's middle name
: (may be null) must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

last - the instructor's last name
: must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

term

a named time period during which courses are offered

example:

{"name":"Fall 2013", "id":"1133", "type":"term", "end":"2013-12-19", "start":"2013-08-29"}

must be a map with the following keys (extra values prohibited):

type
must be term
id - a unique identifier for this term
must be a valid UTF-8 string 1-255 bytes long
comment (optional) - a comment relating to this particular update
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
name - the name of this term, such as Fall 2012
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
start - the first day of classes for this term
a date in YYYY-MM-DD format
end - the last day of classes for this term
a date in YYYY-MM-DD format

subject

a subject, department, or category that a course may belong to

example:

{"name":"American Studies", "abbreviation":"American Studies", "id":"1133-200", "type":"subject", "segments":[{"name":"Courses of Instruction", "id":"0"},{"name":"Primarily for Undergraduate Students", "id":"1"},{"name":"For Both Undergraduate and Graduate Students", "id":"2"},{"name":"Cross-Listed in American Studies", "id":"3"}],"term":"1133"}

must be a map with the following keys (extra values prohibited):

type
must be subject
id - a unique identifier for this subject
must be a valid UTF-8 string 1-255 bytes long
comment (optional) - a comment relating to this particular update
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
term - the id of the term that this subject exists in
must be a valid UTF-8 string 1-255 bytes long
name - the name of this subject, such as Computer Science
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
abbreviation - the abbreviated name of this subject, such as CS
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
segments - a list of the registrar groups that contain courses wthin this subject
(may be an empty array) each array object must contain:

- *id* - (referred to by courses) must be a valid UTF-8 string 1-255 bytes long
- *name* - must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

course

one course of instruction offered during a particular term that is taught in one or more sections

example:

{"credits":null, "subjects":[{"segment":"4", "id":"1141-4600"},{"segment":"2", "id":"1141-1400"}], "name":"Fundamentals of Artificial Intelligence", "requirements":["SN"],"description":"Prerequisites: COSI 21a.\n\nSurvey course in artificial intelligence. Introduction to Lisp and heuristic programming techniques. Topics include problem solving, planning natural language processing, knowledge representation, and computer vision. Usually offered every year.\nMr. Pollack", "continuity_id":"001761", "term":"1141", "independent_study":false, "id":"1141-001761", "type":"course", "code":"COSI 101A"}

must be a map with the following keys (extra values prohibited):

type
must be course
id - a unique identifier for this course
must be a valid UTF-8 string 1-255 bytes long
comment (optional) - a comment relating to this particular update
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
term - the id of the term that this course is offered for
must be a valid UTF-8 string 1-255 bytes long
code - the code or short name of this course, such as CS 101
must be a valid UTF-8 string 1-255 bytes long
subjects - an array of the subjects (and segments) that this course appears within
each array object must contain:

- *id* (id of a subject) - must be a valid UTF-8 string 1-255 bytes long
- *segment* (may be null, id of a segment within this accompanying subject) - must be a valid UTF-8 string 1-255 bytes long

continuity_id - an identifier that uniquely and consistently identifies this course accross different terms
(may be null) must be a valid UTF-8 string 1-255 bytes long
name - the title of this course
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
description - a longer description of this course
(may be null) must meet the following conditions:

- must be a string that is 0-4096 bytes long
- must be a valid UTF-8-encoded string
- must be a string that does not contain HTML tags

credits - the number of credits or credit-hours that this course counts for
(may be null) must be a floating-point number no less than 0
independent_study - whether this course is an independent study or independent instructional course
must be a boolean value
requirements - the ids of requirements that this course fulfills
must be a list where all values meet the condition:

- must be a valid UTF-8 string 1-255 bytes long

section

one instance of a particular course with specific meeting times, instructors, and students
example:
{"instructors":["20279190"], "course":"1141-001761", "status":"open", "status_text":"Open", "section":"1", "details":"See Course Catalog for prerequisites.", "enrolled":30, "waiting":0, "limit":null, "id":"1141-8185-1", "type":"section", "times":[{"building":"Volen Nat'l Ctr for Complex", "room":"119", "days":["tu", "f"], "end":650, "start":570}]}

must be a map with the following keys (extra values prohibited):

type
must be section
id - a unique identifier for this section
must be a valid UTF-8 string 1-255 bytes long
comment (optional) - a comment relating to this particular update
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
course - the id of the course that this section belongs to
must be a valid UTF-8 string 1-255 bytes long
section - the name or number of this section
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
details - any details specific to this section
(may be null) must meet the following conditions:

- must be a string that is 0-4096 bytes long
- must be a valid UTF-8-encoded string
- must be a string that does not contain HTML tags

status - the enrollemnt status of this section, open, closed, restricted or closed_restricted
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
status_text - a textual description of the status to be displayed to the user
must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
enrolled - the number of students enrolled in this section
(may be null) must be an integer no less than 0
limit - the maximum number of students allowed to enroll in this section
(may be null) must be an integer no less than 0
waiting - the number of students on the wait list for this section
(may be null) must be an integer no less than 0
instructors - the ids of the instructors who teach this section
must be a list where all values meet the condition:

- must be a valid UTF-8 string 1-255 bytes long

times - the meeting times of this section
must be a list where all values meet the condition:

- must meet the following conditions:
  - must be a map with the following keys (extra values prohibited):

    start - the start time of this meeting as a number of minutes after midnight
    must be an integer in the closed interval [0, 1440]
    end - end time of this meeting as a number of minutes after midnight
    must be an integer in the closed interval [0, 1440]
    days - the days of the week that this meeting occurs
    must be a list where all values meet the condition:
      - must be one of su, m, tu, w, th, f, sa

type (optional) - the type of this meeting, such as lecture or lab
(may be null) must be a valid UTF-8 string 1-255 bytes long
building (optional) - the name of the building where this meeting occurs
(may be null) must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup
room (optional)
(may be null) must be a valid UTF-8 string 1-255 bytes long that contains neither newlines nor HTML markup

- must list at least one day, and each day may only be listed once