
ps.py Documentation

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alpacas

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PS MODULE

This module contains facility classes and functions to access PowerSchool and change the XML data into a more workable format.

class `ps.Connection`

Creates a temporary browser that connects to PowerSchool using HTTP.

```
>>> conn = Connection()
>>> conn.login('http://powerschool.ausd.net', '12345', 'password')
True
>>> student = conn.get_student()
>>> student.first_name
"Johnny"
>>> student.gpa
"2.5"
```

close()

Closes the browser instance.

error = None

(string) error message from PowerSchool

get_student()

Note: Must be logged in to work.

Create a student from the login information.

get_xml()

Note: Must be logged in to work.

Downloads the XML data from PowerSchool and returns its contents.

logged_in = None

(bool) returns whether Connection was able to log in

login(url, username, password)

Logs into *url* with credentials *username* and *password*.

Parameters

- **url** (*string*) – PowerSchool URL to login into. ex. <http://powerschool.ausd.net/>
- **username** (*string*) – PowerSchool username (usually a Student ID#)

- **password** (*string*) – PowerSchool password

Returns **True** if login was successful. Otherwise, **False**.

student = None

(Student) a Student from the Connection

xml_data = None

(string) downloaded XML data

class `ps.Student` (*loadstring=None*)

A Student is a data structure that holds:

Field	Type	Description
first_name	(string)	First name
last_name	(string)	Last name
gender	(string)	Gender (Male/Female)
gpa	(string)	Grade point average
courses	(course[])	Courses

A course is a dictionary containing:

Field	Type	Description
name	(string)	Course name
teacher	(string)	Course teacher (LastName, FirstName)
letter_grade	(string)	Letter grade received (A, B, C, etc.)
number_grade	(string)	Number grade received (percentage)
in_progress	(bool)	Sees if course is to be included
assignments	(assn[])	Assignments
categories	(string[])	Categories of assignments for course

An assn (assignment) is a dictionary containing:

Field	Type	Description
name	(string)	Assignment name
category	(string)	Category of assignment (test, project, etc.)
due_date	(string)	Due date (Month/Day/Year format)
score	(float)	Score gotten on assignment
out_of	(float)	Total amount of points possible

Parameters **loadstring** (*string*) – XML data to load Student info

courses = None

(course[]) Course list

filter_courses (*cutoff_date*)

Sets each course's *in_progress* attribute to **True** if it is between *cutoff_date* and today.

Parameters **cutoff_date** (*datetime.date*) – Courses between this day (inclusive) will be included.

first_name = None

(string) First name

gender = None

(string) Gender

gpa = None

(string) Grade point average

last_name = None
(string) Last name

load (*loadstring*)
Loads a Student with XML data received from loadstring.

Parameters **loadstring** (*string*) – XML data to load Student from

to_excel ()

Note: Requires that the Student has been loaded.

Returns Creates a xlwt Workbook of the Student's grades.

to_json ()

Note: Requires that the Student has been loaded.

Returns Student in JSON format.

z_to_json (*strength=9*)

Note: Requires that the Student has been loaded.

Does the same thing as `to_json`, but compresses the information with maximum strength before returning it.

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