**Professor functions:**

function: professor\_first\_login

str login\_id (max 15)

str title (max 24)

str last\_name (max 40)

str first\_name (max 40)

str token (max 40)

return positive integer value - professor\_id - if successful, 0 or negative value, otherwise.

If Prof is in database but not token, create new token.

Parameter checked = login id

Info Not in database

Info In database, no token

Info in Database with token, but doesn’t match

(Good case): Info in Database with token that matches

function professor\_class\_list – list of classes available to professor

datetime hashtime

str md5\_hash

int professor\_id

returns list of classes for given professor\_id

[{course\_id, class\_id, section}]

Check:

Profid exists

Throws error when professor has 0 class

Profid has at least one class

Works when professor has one class

Works when professor has more than one class

Php can handle class list array

(Bad case):Profid doesn’t exist – throw error (error object);

function set\_class - used by professor to make class available to login

datetime hashtime

str md5\_hash

int class\_id

int professor\_id

returns datetime date\_set\_time (logins will be checked against this)

returns str verify\_code – you can safely ignore this for now. This is that verify code we talked about before, but we’re not using it yet. We may get to it, but probably not.

Good:

Profid can exist, Classid can exist, Profid and classid match, No class set for that day

Bad Case:

Profid doesn’t exist, Classid doesn’t exist, Profid and classid don’t match, Class is already set for the day

-Error(1. Profid 2.classid 3.professor doesn’t teach that class)

-Update time

function attendance\_by\_date – gives list of students present/absent on given date

datetime hashtime

str md5\_hash

int professor\_id

int class\_id

returns list of students and whether they were present or absent

[{student\_id, last\_name, first\_name, code for that day (see student\_login function for codes)}]

Good:

Classid exists, date exists, classid and profid match, date is valid and has data listed,

Bad:

Classid doesn’t exist, date doesn’t exist, no data for date(weekend)(no error), classid doesn’t match professorid

function set\_attendance

datetime hashtime

str md5\_hash

int professor\_id

int class\_id

date class\_date

int student\_id

int attendance\_code (see student\_login function for codes)

returns positive integer - which will happen to be the tid for that login - for success, < 1for error

Good:

professorid and sectionid match, studentid (exists in roll) for that sectionid

to update student attendance -> if exists(delete then insert data)

functions attendance\_by\_student

datetime hashtime

str md5\_hash

int professor\_id

int class\_id

int student\_id

returns list of class dates and attendance codes:

[{date, code}]

Good:

Classid exists, studentid exists, classid and profid match, student has data listed

Bad:

Classid doesn’t exist, studentid doesn’t exist, no data for student(weekend)(no error), classid doesn’t match professorid

**Student functions:**

function: student\_first\_login

str login\_id (max 15)

str username (max 40)

str last\_name (max 40)

str first\_name (max 40)

str token (max 40)

return positive integer value - student id - if successful, 0 or negative value, otherwise.

Studentid exists

Throws error when student has 0 class

Studentid has at least one class

Works when student has one class

Works when student has more than one class

Php can handle class list array

**(by roll)**

function student\_list – list of classes available to student

datetime hashtime

str md5\_hash

str studentid

returns list of classes for given student\_id

{course\_id, class\_id, section}

studentid exists

Throws error when student has 0 class

studentid has at least one class

Works when student has one class

Works when student has more than one class

Php can handle class list array

function student\_login – student uses to mark self present

datetime hashtime

str md5\_hash

str student\_id

int class\_id

str ip\_address (max 24)

float latitude

float longitude

returns integer:

0 – successful login

1 – login more than 1 hour after set\_course

2 – login more than 3 hours after set\_course

3 – md5\_hash failed

4 – other error

Good:

Studentid can exist, Studentid can exist, Professorid and classid match, No class set for that day

Bad Case:

Studentid doesn’t exist, Classid doesn’t exist, , Professorid and classid don’t match, Class is already set for the day

-Error(1. Studentid 2.classid 3.professor doesn’t teach that class)

-Update time