

Attendance Chimp Testing Plan

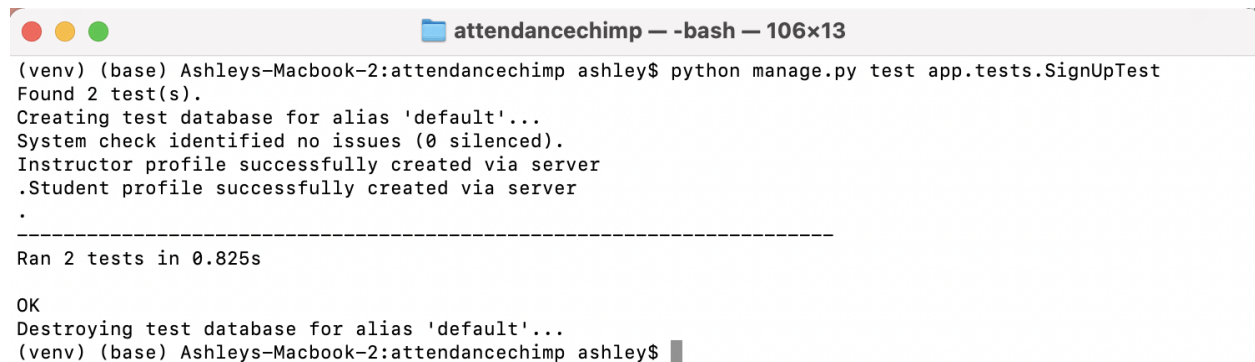
Ashley Hitchings and Noah Taylor

In our Attendance Chimp application, the APIs we want to test functionality for the following:

1. Create users (app/new)
 1. Student class
 2. Instructor class
2. Create a course (app/create)
3. Join class (app/join)
4. Generate instructor QR code for a class meeting to track attendance (app/attendance)
5. Upload student QR code to track attendance (app/upload)
6. View summary statistics about class attendance (app/overview)
7. View stats for students in a class (app/student?course=xyz)

We used a combination of automated scripts and scripts that would aid the type of manual testing we did for the Week 2 workflow.

For (1), we wrote a script in tests.py called SignUpTest that sets up a client and tests post requests for student and instructor user types, printing success messages if it is able to successfully create a student and instructor in the database.



```
attendancechimp — -bash — 106x13
(venv) (base) Ashley-Macbook-2:attendancechimp ashley$ python manage.py test app.tests.SignUpTest
Found 2 test(s).
Creating test database for alias 'default'...
System check identified no issues (0 silenced).
Instructor profile successfully created via server
Student profile successfully created via server
.
-----
Ran 2 tests in 0.825s

OK
Destroying test database for alias 'default'...
(venv) (base) Ashley-Macbook-2:attendancechimp ashley$
```

For (2-3) and (6-7), we created another script called script.py (screenshots of output below) which populates the database with an instructor user who teaches a course, and 7 student users, and then creates multiple class instances and attendance records for each student to preview the summary statistics views. Using the populated database from this script, it is also trivial to then log in as one of the instructor or student profiles, and manually render the views and test the functionality of (3) and (4).

```
(base) C:\Users\njlta\cmisc13600-materials\app\attendancechimp>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...
395136824
System Check identified no issues (0 silenced).
May 12, 2023 - 14:17:18
Django version 4.1.7, using settings 'attendancechimp.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[12/May/2023 14:17:36] "GET /app/student/?courseid=395136824 HTTP/1.1" 302 0
```

Course Name: qzakcvz
Course ID: 395136824
Students Enrolled: 7

Attendance by Class Meeting

Class Meeting	Attendance Records
1	5
2	6
3	5
4	4
5	5
6	6
7	1
8	5
9	3
10	0

Course Name: qzakcvz
Course ID: 395136824

Student Uploads by Class Meeting

Attendance Record for qzakcvz

Student ID	First Name	Last Name	Classes Attended
1	ulhq	wuqx	[1, 2, 3, 5, 6, 8]
2	dfem	pygs	[1, 2, 3, 4, 5, 6, 8]
3	onoe	thyb	[1, 2, 3, 6]
4	xofd	esjj	[1, 2, 3, 5, 6, 8, 9]
5	dwxi	hetc	[3, 4, 6, 7]
6	suiw	axhf	[2, 4, 5, 6, 8, 9]
7	jbwz	ievx	[1, 2, 4, 5, 8, 9]