



Luca de Alfaro @ UCSC

 Search this site

Welcome!

Archived Projects Classes

CMPS 121 - Mobile
Applications

CMPS 121
Mobile
Applications
Winter 2016

Final
Projects

Homework
1

**Homework
2**

Homework
3

Homework
4

Instructions
for grading
homework

Instructions
for
submitting
homework

Lecture 1

Lecture 10

Lecture 11

Lecture 13

Lecture 14

Lecture 15

Lecture 17

Lecture 2

Lecture 3

Lecture 4

Lecture 5

Lecture 6

Lecture 7

Lecture 8

Lecture 9

CMPS 121
Spring 2012 -
Mobile
Applications

CMPS 121
Spring 2014 -

Classes > CMPS 121 - Mobile Applications > CMPS 121 Mobile
Applications Winter 2016 >

Homework 2

Due: Wednesday February 2, 11pm.

Upload Instructions: Upload to [this CrowdGrader assignment](#).
General upload instructions are [available here](#).

Assignment

We are going to build a simple app that interrogates a weather API, and reports the weather conditions for the location.

The Weather API

To get the weather, you need to issue an HTTP GET call to this URL:

```
http://luca-teaching.appspot.com/weather/default/get_weather
```

The response looks like this.

It can be a server error (500).

It can be an application error:

```
{"response": {"result": "error"}}
```

Or else, it can be a proper weather response, which looks similar to this:

```
{"response": {"conditions": {"wind_gust_mph": 0, "temp_f":  
52.299999999999997, "observation_location": {"city": "High  
St, Santa Cruz", "full": "High St, Santa Cruz, California",  
"elevation": "141 ft", "country": "US", "longitude":  
"-122.034447", "state": "California", "country_iso3166":  
"US", "latitude": "36.977425"}, "temp_c":  
11.300000000000001, "relative_humidity": "90%", "weather":  
"Clear", "dewpoint_c": 10, "windchill_c": "NA",  
"pressure_mb": "1025", "windchill_f": "NA", "dewpoint_f":  
50, "wind_mph": 0.0}, "result": "ok"}}
```

(Note the "result": "ok" : this is what tells you that this response is valid).

What you have to build

You have to build an application consisting of one activity.
When you open the activity, there is a button that says: "Get
Weather Conditions".

Mobile Applications
CMPS 121 Spring 2015
Mobile Applications
CMPS 121 Winter 2013 -
Mobile Applications

CMPS 183: Web Applications
CMPS 276 - Software Engineering
CMPS 290G
How to host a simple app on Google Appengine
Raspberry PI Boot Camp

Collaborators

Contact Information

Creating and using a git repository

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Past Projects

Publications

Publications (by topic)

Resources

How to create a simple app on appengine

SlugIOT

Talks

TestDocs

The Wikipedia Authorship Project

External Links

Resume
Luca's personal home page
CrowdGrader
UCSC School of Engineering
UC Santa Cruz



When you click it, it has to do the server call, get the weather conditions, and display them.

You need to display at least

- something from location (city name and elevation, at least)
- temperature
- relative humidity
- wind speed (average and gusts)
- weather (the string tagged by "weather")

You can display more if you wish.

If an error occurs, you have to advise the users with some kind of error string, and you have to let them try again to get the weather.

That's it. A simple assignment on doing http calls.

Please:

- Write your code clearly.
- Use the Retrofit library explained in class.
- Make sure the info is presented readably, does not disappear if the phone/tablet is rotated, and is scrollable so can be read on small screens.

Testing your code

You might find useful these other URLs:

- http://luca-teaching.appspot.com/weather/default/get_500 always returns error 500
- http://luca-teaching.appspot.com/weather/default/get_no_weather always return the Json application error
- http://luca-teaching.appspot.com/weather/default/get_good_weather always returns the weather with no errors (except if errors really happen).

Do not use them in the homework submission, but you may find them useful in testing. After the submission deadline, these functions will work like the standard `get_weather`.

Comments

You do not have permission to add comments.

