Mobile Programming Laboratory

ANDROID
Exams

AA 18/19

University of L'Aquila - Mobile Programming Laboratory
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Teachers

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Teaching Materials

Available on MOODLE platform
    http://www.didattica.univaq.it

Google Drive Repository
https://drive.google.com/drive/folders/1ISqZfn0i9Ub3eWNXbvW00rd0hD9ya8OL?usp=sharing

Cultural Heritage

Requirements

- List of all monuments in your proximity
- Show on map the same monuments
- Monument's details screen
- Save monuments in a database and use these data if your location is not changed

Http request:

http://www.catalogo.beniculturali.it/opendata/?q=api/action/datastore/search.json

GET Parameters:

resource_id=a65f2718-69ae-436b-a034-2dfbb7260bea
limit=[number, max 100]
offset=[number]
filters[column name]=[string]

AA 18/19

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4

Earthquakes

Requirements

- List of all events and/or events in your proximity (distance in km)
- Show on map the same events
- Events' details screen
- Trigger a notification when occurred a new event using a background service

Http request:

http://webservices.rm.ingv.it/fdsnws/event/1/query

GET Parameters:

starttime=[date, in format "yyyy-mm-dd HH:ii:ss"]

endtime=[date, in format "yyyy-mm-dd HH:ii:ss"]

format=[string, text|xml|kml]

orderby=[string, time|time-asc|magnitude|magnitude-asc]

minmag=[number]

maxmag=[number]

lat=[double]&lon=[double]&maxradiuskm=[number]

AA 18/19

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5

Weather

Requirements

- List of weather of the city in your proximity
- Show on map the weather
- Details screen with next 5 days
- Save the data into a database and update them every hour (triggering a notification)
- Save the favourite city

Using the free API of OpenWeatherMap (require a signup) or similar services.

Request example on OpenWeatherMap:

```
http://api.openweathermap.org/data/2.5/find
    lat=42.294868
    lon=13.295524
    cnt=50
    appid=<YOUR API KEY>
```

Pharmacies

Requirements

- List of pharmacies in your town
- Show on map the same data
- Pharmacy's details screen
- Save the data into the database

Open Data, as a CSV file, is available on www.dati.salute.gov.it

http://www.dati.salute.gov.it/imgs/C_17_dataset_5_download_itemDownload0_upFile.CSV

Be Careful! The database contains all pharmacies, closed too. You can just parse the current pharmacies ('DATAFINEVALIDITA' column must be empty or without any date).

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7