

Marvel app

Intro

Build a Marvel app which helps to lookup any Marvel character.

Code delivery

Please deliver only the source code, without any libraries, IDE specific files, generated sources or OS specific files attached. Please note that your project should be capable of building on any operating system, if there are any specific steps required to build or start application please provide instructions in README.md file located in root folder of the project. Please note that during code evaluation code structure, tests and usage of design patterns will be assessed as part of submission.

Functionality

On the opening screen the user can enter a Marvel character name and press the button; or select one of her last 5 (distinct) successfully looked up names.

On the second screen the user can see the name, the picture and the description of the Marvel character (using the official Marvel API).

Details

First screen

Contains an input field with label "Character", a button "Show" next to it; below the input field and the button, there should be max 5 items which are the previously **successfully looked up distinct** Marvel character names; this list should be available after app restart, **please use SQLite database**.

Pushing the "Show" button or any of the search history items should show a progress indicator first until you get result or error. In case of:

- API error you have to show "An error happened" somewhere on the first screen, and the error message / stack trace must be on the console.

- empty search result you have to show "The entered name is wrong" somewhere on the first screen.
- proper result, the second screen should be shown.

Second screen

Shows the name, the thumbnail and the description of the character. The physical back button should lead to the first screen.

Marvel API

You have to use the official Marvel API for that, and **the API keys must be stored in a properties file or in a build variant**

Please register on <http://developer.marvel.com/>
You should create the public and private API keys on

How to use the Marvel API

Example curl call which gets "Iron Man" as result:

```
curl -X GET
http://gateway.marvel.com:80/v1/public/characters\?name\=Iron%20Man\&apikey\=PUBLIC_API_KEY\&hash\=HASH\&ts\=TIMESTAMP
```

- `http(s)://gateway.marvel.com:80/v1/public/characters` => this is the endpoint for retrieving characters
- `name=Iron%20Man` => name parameter must be used to filter by name; space must be replaced with `%20`
- `apikey=PUBLIC_KEY` => in this parameter you have to provide the public key
- `ts=TIMESTAMP` => in this parameter you have to provide the timestamp
- `hash=HASH` => in this parameter you have to provide the md5 hash of the `ts + privateKey + publicKey` => `md5(ts+privateKey+publicKey)` where the `+` is the string concatenation

Image handling

Use the `portrait_xlarge` image size.

Example: http://i.annihil.us/u/prod/marvel/i/mg/9/c0/527bb7b37ff55/portrait_xlarge.jpg

Documentation <http://developer.marvel.com/documentation/images>

Response structure

About the response structure:

http://developer.marvel.com/docs#!/public/getCreatorCollection_get_0 (interactive API documentation, you can try it out)

http://developer.marvel.com/documentation/entity_types (character is interesting for you)