

Dokumentácia k sťahovaniu dát z GitHub

Dopyty, pomocou ktorých vieme získať údaje o commitoch sú opísané na stránke:

<https://developer.github.com/v3/repos/commits/>

Príklady použitia dopytov:

1. Získanie údajov o commite s číslom commitu `cislo_commitu`, v repozitári `nazov_repozitara`, ktorý založil používateľ `meno_vlastnika`.

`http://api.github.com/repos/meno_vlastnika/nazov_repozitaru/commits/cislo_commitu`

Príklad:

- `http://api.github.com/repos/mapbox/mapbox-gl-native/commits/b49c5a711a0e7a866c2e9fd6c88eb19a77a6a018/`
- `http://api.github.com/repos/mapbox/mapbox-gl-native/commits/9eb7f88b2c292d322a104c4580c3ef29958b628b`

2. Získanie všetkých commitov z obdobia `from` - `to`, v repozitári `nazov_repozitara`, ktorý vytvoril používateľ `meno_vlastnika`.

`http://api.github.com/repos/meno_vlastnika/nazov_repozitaru/commits?since=from&until=to`

Príklad:

`http://api.github.com/repos/mapbox/mapbox-gl-native/commits?since=2016-11-27T16:50:24Z&until=2016-11-28T12:39:52Z`

Príklad (stiahnutie commitov zo dňa 27.11.2016) :

```
DateTime startDate = new DateTime(2016, 11, 27);
```

```
DateTime endDate = new DateTime(2016, 11, 28);
```

```
String startDateStr = (startDate.ToString("s") + "Z");
```

```
String endDateStr = (endDate.ToString("s") + "Z");
```

3. Získanie všetkých tagov repozitáru:

`https://api.github.com/repos/user_name/repos_name/tags`

Príklad:

`https://api.github.com/repos/eclipsesource/tabris-js/tags`

4. Získanie všetkých branches repozitára:

`https://api.github.com/repos/user_name/repos_name/branches`

Príklad:

`https://api.github.com/repos/eclipsesource/tabris-js/branches`

Http odpoveďou na dopyty je list JSON objektov. Každý objekt predstavuje informácie o jednom commite.

```
[
```

```
{
```

```
  "url":
```

```
  "https://api.github.com/repos/octocat/Hello-World/commits/6dcb09b5b57875f334f61aebd695e2e4193db5e",
```

```
"sha": "6dcb09b5b57875f334f61aebd695e2e4193db5e",
"html_url": "https://github.com/octocat/Hello-World/commit/6dcb09b5b57875f334f61aebd695e2e4193db5e",
"comments_url":
"https://api.github.com/repos/octocat/Hello-World/commits/6dcb09b5b57875f334f61aebd695e2e4193db5e/com
ments",
"commit": {
  "url":
"https://api.github.com/repos/octocat/Hello-World/git/commits/6dcb09b5b57875f334f61aebd695e2e4193db5e",
  "author": {
    "name": "Monalisa Octocat",
    "email": "support@github.com",
    "date": "2011-04-14T16:00:49Z"
  },
  "committer": {
    "name": "Monalisa Octocat",
    "email": "support@github.com",
    "date": "2011-04-14T16:00:49Z"
  },
  "message": "Fix all the bugs",
  "tree": {
    "url":
"https://api.github.com/repos/octocat/Hello-World/tree/6dcb09b5b57875f334f61aebd695e2e4193db5e",
    "sha": "6dcb09b5b57875f334f61aebd695e2e4193db5e"
  },
  "comment_count": 0,
  "verification": {
    "verified": true,
    "reason": "valid",
    "signature": "-----BEGIN PGP MESSAGE-----\n...\n-----END PGP MESSAGE-----",
    "payload": "tree 6dcb09b5b57875f334f61aebd695e2e4193db5e\n..."
  }
},
"author": {
  "login": "octocat",
  "id": 1,
  "avatar_url": "https://github.com/images/error/octocat_happy.gif",
  "gravatar_id": "",
  "url": "https://api.github.com/users/octocat",
  "html_url": "https://github.com/octocat",
  "followers_url": "https://api.github.com/users/octocat/followers",
  "following_url": "https://api.github.com/users/octocat/following{/other_user}",
  "gists_url": "https://api.github.com/users/octocat/gists{/gist_id}",
```

```

"starred_url": "https://api.github.com/users/octocat/starred{/owner}/{repo}",
"subscriptions_url": "https://api.github.com/users/octocat/subscriptions",
"organizations_url": "https://api.github.com/users/octocat/orgs",
"repos_url": "https://api.github.com/users/octocat/repos",
"events_url": "https://api.github.com/users/octocat/events{/privacy}",
"received_events_url": "https://api.github.com/users/octocat/received_events",
"type": "User",
"site_admin": false
},
"committer": {
"login": "octocat",
"id": 1,
"avatar_url": "https://github.com/images/error/octocat_happy.gif",
"gravatar_id": "",
"url": "https://api.github.com/users/octocat",
"html_url": "https://github.com/octocat",
"followers_url": "https://api.github.com/users/octocat/followers",
"following_url": "https://api.github.com/users/octocat/following{/other_user}",
"gists_url": "https://api.github.com/users/octocat/gists{/gist_id}",
"starred_url": "https://api.github.com/users/octocat/starred{/owner}/{repo}",
"subscriptions_url": "https://api.github.com/users/octocat/subscriptions",
"organizations_url": "https://api.github.com/users/octocat/orgs",
"repos_url": "https://api.github.com/users/octocat/repos",
"events_url": "https://api.github.com/users/octocat/events{/privacy}",
"received_events_url": "https://api.github.com/users/octocat/received_events",
"type": "User",
"site_admin": false
},
"parents": [
{
"url":
"https://api.github.com/repos/octocat/Hello-World/commits/6dcb09b5b57875f334f61aebcd695e2e4193db5e",
"sha": "6dcb09b5b57875f334f61aebcd695e2e4193db5e"
}
]
}
]

```

U klienta sa http odpovede spracovávajú na list objektov, z ktorých sa vytvárajú RDF trojice, ktoré sa zoskupujú do grafu a posielajú na server, ktorý ich kontroluje podľa pravidiel ontológie.

Stratégia:

Poznáme meno **organizácie** a **repozitáru**, **dátum** a **interval**:

1. Vyhľadanie všetkých **branches** pre repozitár.
 - a. Vyhľadania všetkých commitov pre všetky branches.
 - b. Vytvorenie RDF trojíc o repozitár - branch.
 - c. Vytvorenie RDF trojíc o branch - commit.
2. Vyhľadanie všetkých **tagov** pre repozitár.
 - a. Vyhľadanie všetkých commitov pre všetky tagy.
 - b. Vytvorenie RDF trojíc o repozitár - tag.
 - c. Vytvorenie RDF trojíc o tag - commit.
3. Vyhľadanie všetkých **commitov** pre repozitár.
 - a. Vytvorenie RDF trojíc o commitoch.
 - b. Vyhľadanie všetkých **blobov** pre každý commit.
 - c. Vytvorenie RDF trojíc o commit - blob.