

Sprawozdanie - Zaawansowane technologie bazodanowe

Laboratorium 3 - 22.11.2019

CouchDB

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Zadanie 1

Utworzenie bazy danych

```
curl -X PUT http://nosql.kis.agh.edu.pl:5984/dwrobel
```

Zadanie 2

Utworzenie i dodawanie dokumentów

- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @an1.json`
- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @an2.json`
- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @ms1.json`
- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @ms2.json`
- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @as1.json`
- `curl -X POST http://nosql.kis.agh.edu.pl:5984/dwrobel -H "Content-Type: application/json" -d @as1.json`

Field	Value
_id	"07909e1c065830be62e30169510714f6"
_rev	"1-3e05ab3492345b6332398e40fe887b6f"
content	"Hello World !"
date	"Fri Nov 22 2019 08:44:07 +0100"
type	"announcement"

Zadanie 3

Dodanie widoku sortującego ogłoszenia po dacie

```
{
  "_id": "_design/announcement",
  "language": "javascript",
  "views": {
    "sortAnnouncement": {
      "map": "function(doc){if(doc.type == 'announcement'){emit(doc.date,
doc.content);}}"
    }
  }
}
```

Odpowiedź na zapytanie

http://nosql.kis.agh.edu.pl:5984/dwrobel/_design/announcement/_view/sortAnnouncement

```
{ "total_rows": 2, "offset": 0, "rows": [
  { "id": "07909e1c065830be62e30169510714f6", "key": "Fri Nov 22 2019
08:44:07 +0100", "value": "Hello World !" },
  { "id": "07909e1c065830be62e30169510735e6", "key": "Fri Nov 22 2019
08:55:07 +0100", "value": "This is to announce... !" }
]}
```

Zadanie 4

Dodanie widoku zliczającego litery w dokumencie

```
{
  "_id": "_design/letters",
  "language": "javascript",
  "views": {
    "countLetters": {
      "map": "function(doc){
        var contentLetters = '';
        for(var key in doc) {
          if(key != '_id' && key != '_rev'){
            contentLetters += doc[key]
          }
        }
        var letters = contentLetters.toLowerCase().split('');
        for(var i=0; i<letters.length; i++){
          emit(letters[i],1);
        }
      }",
      "reduce": "_sum"
    }
  }
}
```

Odpowiedź na zapytanie

http://nosql.kis.agh.edu.pl:5984/dwrobel/_design/letters/_view/countLetters?group=true

```
{
  "rows": [
    {"key": " ", "value": 46},
    {"key": ",", "value": 1},
    {"key": ":", "value": 8},
    {"key": "!", "value": 3},
    {"key": "?", "value": 1},
    {"key": ".", "value": 3},
    {"key": "+", "value": 4},
    {"key": "0", "value": 28},
    {"key": "1", "value": 12},
    {"key": "2", "value": 15},
    {"key": "4", "value": 3},
    {"key": "5", "value": 5},
    {"key": "6", "value": 1},
    {"key": "7", "value": 4},
    {"key": "8", "value": 2},
    {"key": "9", "value": 6},
    {"key": "a", "value": 12},
    {"key": "c", "value": 5},
    {"key": "d", "value": 1},
    {"key": "e", "value": 31},
    {"key": "f", "value": 4},
    {"key": "g", "value": 2},
    {"key": "h", "value": 5},
    {"key": "i", "value": 8},
    {"key": "l", "value": 7},
    {"key": "m", "value": 10},
    {"key": "n", "value": 30},
    {"key": "o", "value": 28},
    {"key": "p", "value": 6},
    {"key": "r", "value": 21},
    {"key": "s", "value": 24},
    {"key": "t", "value": 17},
    {"key": "u", "value": 4},
    {"key": "v", "value": 7},
    {"key": "w", "value": 3},
    {"key": "y", "value": 4}
  ]
}
```