**Technical task\*\*\***

**Increase Ecommerce Sales\*\*\* (IncreaseES, increase\_es, ies)**

**Internet Gold Rush**

The Internet has a big role in a person's daily life. Most of the young and adult mens has access to the global network, and regularly uses it. And as a consequence, online sales are growing with the expansion of Internet use. It should be noted the widespread use of mobile devices, which led to the growth of mobile e-sales.

**Main goals of IncreaseES application to explore:**

- How to successfully sell goods and services through the Internet?

- Best methods of SEO (Search Engine Optimisation) for sale?

- Best methods for sale on C2C sites?

**The IncreaseES application help to:**

- Collect, describe, analyze all the methods and factors influencing the number of clicks, calls and sales on the websites of online stores.  
- Store, collect, edit data of the positions of the own online sites in the search results of search engines system (Google, Yandex).  
- Group, analyze all marketing methods and other factors to increase sales on C2C sites.

**Requirements:**

- Working on computers.

- Main online Database.

- Storing, creating, editing, deleting data for SEO methods(description, using, results) by small business sites (https://textile-shop.kz/, https://phonealmaty.kz/, https://gn-shop.kz/, https://gn-sphera.kz/, https://it-office.kz/ ).

- Storing, creating, editing, deleting data for sales methods(description, using, results) by C2C sites (https://www.olx.kz/, https://market.kz/).

**Chart for analyze:**

- TOP 10/100 important SEO rules.

- TOP 10/50 important marketplace rules.

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**Developer tools\*\*\***

- Python 3.8: Visual Studio Code 1.69.1.

- MongoDB ATLAS online 24\*7: MongoDB Compass.

- Django 3.1 – web-framework.

- D3.js – library for reports.

**DBMS\*\*\***

Cloud MongoDB ATLAS – free, 24\*7, NoSQL.

**Algorithm\*\*\***

Window 1:

- choice users (main, first, second etc) .

- enter password.

Window 2:

- replication:

- replication new suppliers and new depended suppliers\_deals

- replication old suppliers and new depended suppliers\_deals

- replication new customers and new depended customers\_deals

- replication old customers and new depended customers\_deals

- select, insert, update, delete data.

- choice type of data (suppliers {linens, bags, phones, used phones, mobile accessories, computer accessories}, contractor, customers with big deals).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Edit | admin | superUser | readAndSite | readAndResult | readAndMarketplace | readOnly |
| **seo\_level** | **+** | **+** |  |  |  |  |
| **search\_engine\_system** | **+** | **+** |  |  |  |  |
| **sites** | **+** | **+** |  |  |  |  |
| **users** | **+** | **+** |  |  |  |  |
| **seo\_rules** | **+** | **+** | **+** |  |  |  |
| **site\_pages** | **+** | **+** | **+** |  |  |  |
| **key\_phrases** | **+** | **+** |  |  |  |  |
| **seo\_results** | **+** | **+** |  | **+** |  |  |
| **marketplace\_rules** | **+** | **+** |  |  | **+** |  |
| **marketplaces** | **+** | **+** |  |  | **+** |  |
| **marketplace\_sales** | **+** | **+** |  |  | **+** |  |
| **roles** | **+** |  |  |  |  |  |

**Structure DB\*\*\***

**increase\_esales – database name.** Increase Ecommerce Sales

**seo\_level – Collection of seo level**

id -

level\_rule – string. Level of SEO rule: Домен, Страница, Сайт, Ссылки, Пользователь, Спецправила, Соцсети, Бренды, Спам сайта, Спам ссылок.

description – string.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique seo\_level\_rule: name\_rule, dataset.

**seo\_rules – Collection of all seo rules and topics**

id -

**seo\_level\_rule – seo\_level.level\_rule**. Level of SEO rule: Домен, Страница, Сайт, Ссылки, Пользователь, Спецправила, Соцсети, Бренды, Спам сайта, Спам ссылок, Прочее. Default = ''.

**name\_rule** – string. Full name.

rating\_rule – integer. Impact assessment of rule for SEO. Min – 1, Max – 10. Default = 0.

description - string. Full description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique seo\_name\_rule: name\_rule, dataset.

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**sites – Collection of working sites**

id -

name\_site – string. Example: **phonealmaty.kz, textile-shop.kz, it-office.kz, gn-shop.kz, gn-sphera.kz**.

main\_page – string. Full HTTP.

description - string. Full description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique sites\_name\_site: name\_site, dataset.

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**site\_pages – Collection of all pages of all site**

**id** -

**name\_site** – string. Example: **textile-shop.kz.**

**level\_page** – integer. (1 – main page, 2 – section/division, 3 – group of product cards, 4 - product card)

**key\_phrase** – string. Key phrase of page for SEO.

**quantity\_request** – integer. Quantity requests for key phrase for Google.

**competition\_level** – 1. Competition level among sites for key phrase for Google in local region.1 – very low, 12 – very high.

**errors** – integer. Number of grammatical errors.

**duplication** – integer. Duplication with one page sites. Maximum of internal and external.

**quantity\_words** – integer.. Quantity words on the page.

**keyword\_percentage** – string. Keyword percentage on the page. В любом порядке, не полное вхождение(a+b+c)

**number\_keywords** – integer. Number of key words on the page (30+15+15).

**percentage\_keywords** – real. Percentage of keywords on the page. Полное вхождение с сохранием предлогов, позиции и окончания(a=>b=>c)

**url** – string. HTTP format.

**price** – integer. Percentage cost per unit. 50 – very low, 75 – low, 100 – middle, 125 – high, 150 – very high.

**create\_date** – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique site\_pages\_name\_site: name\_site, key\_phrase, dataset.

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**search\_engine\_system – Collection of search engine system**

id -

search\_system - string. Exam: google.kz, yandex.kz, google.kz(mob.), yandex.kz(mob.) and etc

description - string. Full description.

create\_date

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique search\_engine\_system\_index: search\_system, dataset.

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**key\_phrases – Collection of key word phrase by own sites for Google and Yandex**

id -

search\_system – search\_engine\_system.search\_system. Example: google.kz, yandex.kz, google.kz(mob.), yandex.kz(mob.) and etc

name\_site – sites.name\_site. **phonealmaty.kz, textile-shop.kz, it-office.kz, gn-shop.kz, gn-sphera.kz**.

pos1 – string - key phrase .

...

pos20 – string - key phrase.

description - string. Full description.

create\_date

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique seo\_results\_index: search\_system, name\_site, type\_data, check\_date, dataset.

\*mob. - mobile

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**seo\_results – Collection of SEO results for important key phrase for Google and Yandex by sites**

id -

search\_system – search\_engine\_system.search\_system. Example: google.kz, yandex.kz, google.kz(mob.), yandex.kz(mob.) and etc

name\_site – string. **phonealmaty.kz, textile-shop.kz, it-office.kz, gn-shop.kz, gn-sphera.kz**.

check\_date – date. Date of report.

pos1 – integer - **pos**ition in search for key phrase

...

pos20 – integer - **pos**ition in search for key phrase

description - string. Full description.

create\_date

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Index unique seo\_results\_index: search\_system, name\_site, type\_data, check\_date, dataset.

\*mob. - mobile

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**marketplace\_rules - Collection of marketplace rules for for best sales**

id -

group\_rule – string.

name\_rule – string. Full name.

rating\_rule – integer. Impact assessment of rule. Min – 1, Max – 10.

description - string. Full description.

create\_date – date. Date of creating document.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Indexes unique marketplace\_rules\_name\_rule: name\_rule, dataset.

Insert recort in web-browser Atlas MongoDB for definite type of fields

https://cloud.mongodb.com/v2/626679fb23af02426e088c47#metrics/replicaSet/62d7f89b4336c13f8b5a3a68/explorer/increase\_esales/marketplace\_rules/find

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**marketplaces - Collection of marketplaces**

id -

name\_marketplace – string. Example:olx.kz, market.kz.

main\_page – string. HTTP.

description - string. Full description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Indexes unique marketplaces\_name\_marketplace: name\_marketplace, dataset.

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**marketplace\_sales - Collection of sales marketplaces**

id -

name\_marketplace – string. Example: **olx.kz.**

key\_phrase – string. Key phrase of page for searching.

competition\_level – integer. Quantity page with same key phrase on the site.

guarantee – integer. How mutch days of guarantee.

price – integer. Cost per unit.

description - string. Full description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Indexes unique marketplace\_sales\_name: (name\_marketplace, key\_phrase, dataset).

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**roles – Collection of roles**

id -

role – Roles: **admin** – superUser + direct access to DB, **superUser** – all permissions, **readOnly** – only read all data, **readAndSite** - insert/update/delete only site data and read all data, **readAndMarketplace** - insert/update/delete only marketplace data and read all data, **readAndResult** - insert/update/delete only SEO result data and read all data.

descripton – string. Description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Permission regulate by developing scripts.

Indexes unique **roles\_index**: role, dataset.

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**users – Collection of all user**

id -

user\_name – string. User name.

pswrd – string. Password.

**roles\_**role – **reference to roles.role.**

descripton – string. Description.

create\_date – date. Date of creating record.

dataset – integert. 1 - live, 0 – archive/deleted, -1/-2/-3 – reserv.

last\_user - string. Last user.

last\_changed - timestamp. Date and time last changed.

Indexes unique users\_index: user\_name, dataset.

Default password

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**Encrypt password**

pip install bcrypt

import bcrypt

pwd = 'MyPassWord'

bytePwd = password.encode('utf-8')

# Generate salt

mySalt = bcrypt.gensalt()

# Hash password

hash = bcrypt.hashpw(bytePwd, mySalt)

b'$2b$12$1XCXpgmbzURJvo.bA5m58OSE4qhe6pukgSRMrxI9aNSlePy06FuTi'

print(bcrypt.checkpw(password, hash))

# Output: True

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**Types of goods, services\*\*\***

Новые телефоны

БУ телефоны

Аксессуары моб.

Аксессуары комп.

Аксессуары проч. - ТВ, батарейки, калькуляторы,

Текстиль - Постель, Полотенца, Халаты

Сумки, Рюкзаки

Сантехник

Сайты

Прочее

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**Reports\*\*\***

- Sites by quantity and quantity words on pages.

- Sites by average quantity, duplication, keyword percentage of words on pages

- Sites by summary quantity words on pages.

- Marketplaces by quantity page of sale.

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{  
 "\_id": {  
 "$oid": "1"  
 },  
"role": "super",  
"descripton": "all permissions",  
"create\_date": "2018.08.01"  
}

db.createCollection("**marketplace\_rules**", {

validator: {

$jsonSchema: {

bsonType: "object",

required: [ "name\_rule", "description", "create\_date" ],

properties: {

name\_rule: {

bsonType: "string",

description: "Full name"

},

description: {

bsonType: "string",

description: "Full description"

},

create\_date: {

bsonType: "date",

description: "Date of creating document"

}

}

}

}

})

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http://localhost:8000/static/ies\_style.css