Итоговая самостоятельная работа Прекель
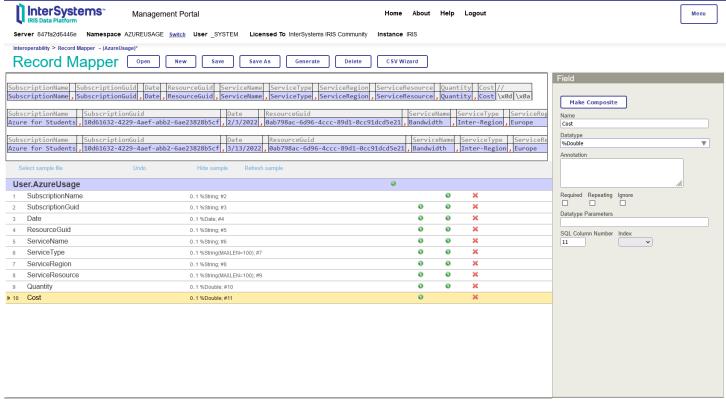
Цель:
Данное задание предназначено для закрепления знаний по технологиям BI. Итогом выполнения работы должен стать сайт, использующий куб для построения инфо графики по выбранным исходным данным.

Задачи:

1.   Определиться с предметной областью - подобрать исходные данные (БД, csv, xml, excel и т.д.). В качестве вариантов рекомендуется обратить внимание на правительственные ресурсы с open data.
2.   Создать новую область в IS IRIS. На базе выбранных исходных данных сформировать таблицы и заполнить их (парсинг, миграция, csv mapper).
3.   Выбрать таблицу фактов. На базе данной таблицы построить куб (подобрать измерения, иерархии, показатели, списки, и т.д.).
4.   Сформировать сводную таблицу для получения базового MDX запроса.
5.   Установить и настроить библиотеку MDXtoJSON (репозиторий).
6.   Протестировать работу библиотеки на базовых GET запросах.
7.   Создать веб-приложение для размещения инфографики (можно использовать любые подходящие вам инструменты: angular, react, view, чистый html+js с использование ajax запросов и т.д.).
8.   Подобрать библиотеку для отображения инфографики на сайте.
9.   Создать несколько компонентов инфографики, с рядом доступных фильтров.
- Пользователь выбирает/вводит данные в фильтре
- Значения из фильтров встраиваются в приготовленный MDX запрос (из пункта 4)
- MDX запрос отправляется как параметр http запроса приложению MDXtoJSON
- В качестве ответа получаются данные и описание колонок в JSON
- После обработки данные должны отрисоваться выбранной библиотекой

Данные: https://github.com/prekel/azureusage/blob/master/AzureUsage(5).csv
Исходный код: https://github.com/prekel/azureusage

Interoperability > Record Mapper - (AzureUsage)*

Record Mapper

Open   New   Save   Save As   Generate   Delete   CSV Wizard

```
SubscriptionName  SubscriptionGuid  Date  ResourceGuid  ServiceName  ServiceType  ServiceRegion  ServiceResource  Quantity  Cost //
SubscriptionName ,SubscriptionGuid ,Date ,ResourceGuid ,ServiceName ,ServiceType ,ServiceRegion ,ServiceResource ,Quantity ,Cost \x0d \x0a
```

SubscriptionName	SubscriptionGuid	Date	ResourceGuid	ServiceName	ServiceType	ServiceReg
Azure for Students,	10d61632-4229-4aef-abb2-6ae23828b5cf,	2/3/2022,	0ab798ac-6d96-4ccc-89d1-0cc91dcd5e21,	Bandwidth,	Inter-Region,	Europe

SubscriptionName	SubscriptionGuid	Date	ResourceGuid	ServiceName	ServiceType	ServiceReg
Azure for Students,	10d61632-4229-4aef-abb2-6ae23828b5cf,	3/13/2022,	0ab798ac-6d96-4ccc-89d1-0cc91dcd5e21,	Bandwidth,	Inter-Region,	Europe

Select sample file   Undo   Hide sample   Refresh sample

User.AzureUsage

#				
1	SubscriptionName	0..1 %String; #2		✖
2	SubscriptionGuid	0..1 %String; #3	⊕ ⊕	✖
3	Date	0..1 %Date; #4	⊕ ⊕	✖
4	ResourceGuid	0..1 %String; #5	⊕ ⊕	✖
5	ServiceName	0..1 %String; #6	⊕ ⊕	✖
6	ServiceType	0..1 %String(MAXLEN=100); #7	⊕ ⊕	✖
7	ServiceRegion	0..1 %String; #8	⊕ ⊕	✖
8	ServiceResource	0..1 %String(MAXLEN=100); #9	⊕ ⊕	✖
9	Quantity	0..1 %Double; #10	⊕ ⊕	✖
» 10	Cost	0..1 %Double; #11	⊕	✖

Field

Make Composite

Name
Cost

Datatype
%Double ▼

Annotation

Required   Repeating   Ignore
☐   ☐   ☐

Datatype Parameters

SQL Column Number   Index
11   ▼

Open Table

Refresh   Close Window

User_AzureUsage.Record in namespace AZUREUSAGE   Last update: 2022-04-21 11:24:22.440

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3	3	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	03/14/2022	0ab798ac-6d96-4ccc-89d1-0cc91dcd5e21	Bandwidth	Inter-Region	Europe	Data Transfer Out	.00023399999999999576	.000000500000000004091	
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22	22	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	02/17/2022	d10c880f-c782-407f-97a1-0d25a42dd628	Storage	Files v2	EU North	LRS Metadata	.00007200000000001824	0	
23	23	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	02/18/2022	d10c880f-c782-407f-97a1-0d25a42dd628	Storage	Files v2	EU North	LRS Metadata	.00007200000000001824	0	
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46	46	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	03/13/2022	d10c880f-c782-407f-97a1-0d25a42dd628	Storage	Files v2	EU North	LRS Metadata	.00007200000000001824	0	
47	47	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	03/14/2022	d10c880f-c782-407f-97a1-0d25a42dd628	Storage	Files v2	EU North	LRS Metadata	.00007200000000001824	0	
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49	49	Azure for Students	10d61632-4229-4aef-abb2-6ae23828b5cf	03/16/2022	d10c880f-c782-407f-97a1-0d25a42dd628	Storage	Files v2	EU North	LRS Metadata	.00007200000000001824	0	
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Analyzer

New | Open | Save | Save As | Restore | Delete | ☑ Auto-execute | ☐ Preview Mode View:

AzureUsage

Dimensions ▾

▾ **Measures**
- ◯ Count
- ◯ Cost
- ◯ Quantity

▾ **Dimensions**
- ▸ Type
- ▸ ServiceRegion
- ▸ ServiceName
- ▸ ResourceGuid
- ▸ Date
- ▸ SubscriptionGuid
- ▸ SubscriptionName

Rows
- ServiceName ⬎ ⚙ ✕
- ServiceType ⬎ ⚙ ✕
- ServiceResource ⬎ ⚙ ✕
- Drop row here

Columns
- Month ⬎ ⚙ ✕
- Drop column here

Measures
- Cost ⚙ ✕
- Drop measure here

Filters
- Drop filter here

ServiceName	ServiceType	ServiceResource	May-2021	Jun-2021	Jul-2021	Aug-2021	Sep-2021	Oct-2021	Nov-2021	Dec-2021	Jan-2022	Feb-2022	Mar-2022	Apr-2022
Azure App Service	Basic Plan - Linux	B1	0.02				0.01		10.34	12.70	11.72	12.04	3.24	
	Free Plan	F1	0.00				0.00						0.00	
	Free Plan - Linux	F1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Backup	All	Azure Files Protected Instances										0.08		
Bandwidth	All	Data Transfer In										0.00	0.00	0.00
		Data Transfer Out - Free										0.00	0.00	0.00
	Inter-Region	Data Transfer In										0.00		
		Data Transfer Out										3.07	0.00	
Container Instances	All	Memory Duration					0.08							
		vCPU Duration					0.45							
Storage	Files	Delete Operations										0.00		
		List Operations - Free										0.00		
		LRS Write Operations - Free										0.00	0.00	
		Protocol Operations - Free										0.00	0.00	0.00
		Read Operations - Free										0.00		
	Files v2	Cool LRS Data Stored										2.80	3.10	2.02
		Cool LRS Write Operations										4.31	0.02	
		Cool Other Operations										0.01		
		Cool Read Operations										0.12		
		LRS Metadata										0.00	0.00	0.00
	Premium Files	LRS Provisioned										17.78		
	Standard HDD Managed Disks	Disk Operations - Free											0.00	
		S4 Disks											0.26	

Cells: 1 Total: 3.07

| 10.49.0.1 | 9092 | AZUREUSAGE | _SYSTEM | ●●●●●●●●●●●●●● | Login |