Week 3 - Lab 2: Query Analysis Examples (including textual analysis)

Agenda

- A step by step example of how to perform query analysis on data including textual analysis

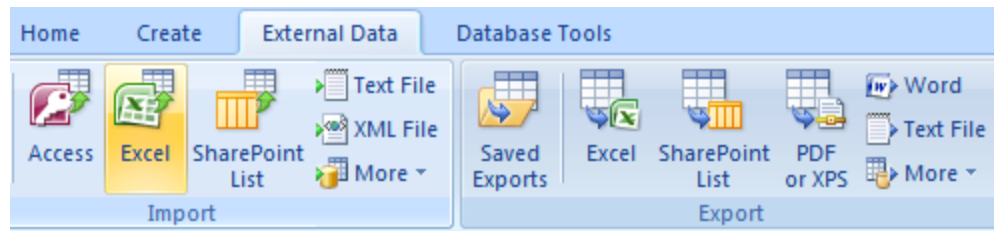# Data Source

Data from a survey on most popular websites

	B	Website1	Website2	Website3	Website4	Website5
	Student					
1	Hotmail	Yahoo	Facebook	Bank	Youtube
2	UofC	Google	Hotmail	Bank	Facebook
3	StockWatch	StockHouse	Kitco	Canucks.com	Arsenal.com
4	UofC	Google	Bank	Null	Null
5	Google	TheLottery	NHL.com	Wikipedia	Funnyjunk.com
6	Yahoo	MySpace	Google	MSN	Null
7	Hotmail	Facebook	Youtube	UofC	MySpace
8	Yahoo	Facebook	Youtube	Hi5	Null
9	Google	Youtube	Wikipedia	NFL.com	Horoscope
10	Google	Youtube	Wikipedia	NHL.com	Hotmail
11	Google	Facebook	Shawlife.com	Calgaryplanet	Hotmail
12	Google	Hotmail	Facebook	Lonelyplanet	Youtube

Expected Result Format

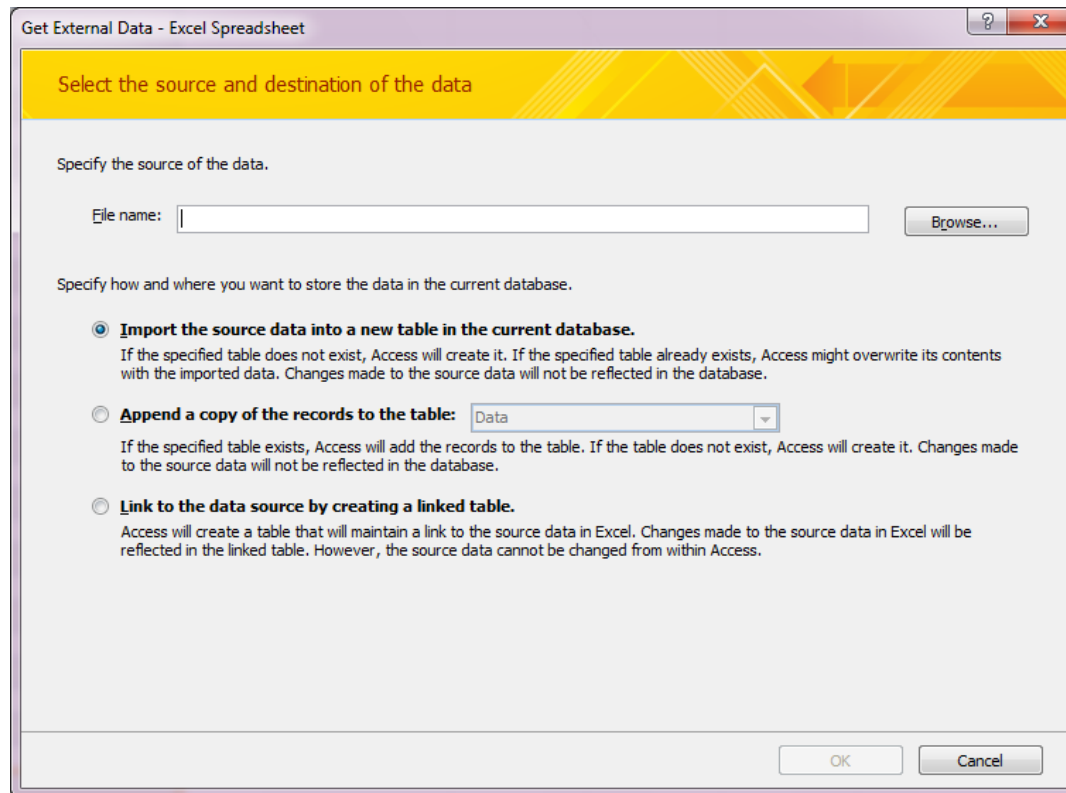| Score	WebsiteName
208	Facebook
184	Google
140	Hotmail
93	UofC
54	Yahoo
47	MSN
45	Youtube
39	Wikipedia
32	Null
27	NHL.com
19	Gmail
16	Bank
12	BlackBoard
9	Webmail
9	NBA.com
7	Dictionary.com

WebsiteScoreSummary

Step 1: Import data to MS Access

- From *External Data* context, select *Excel*
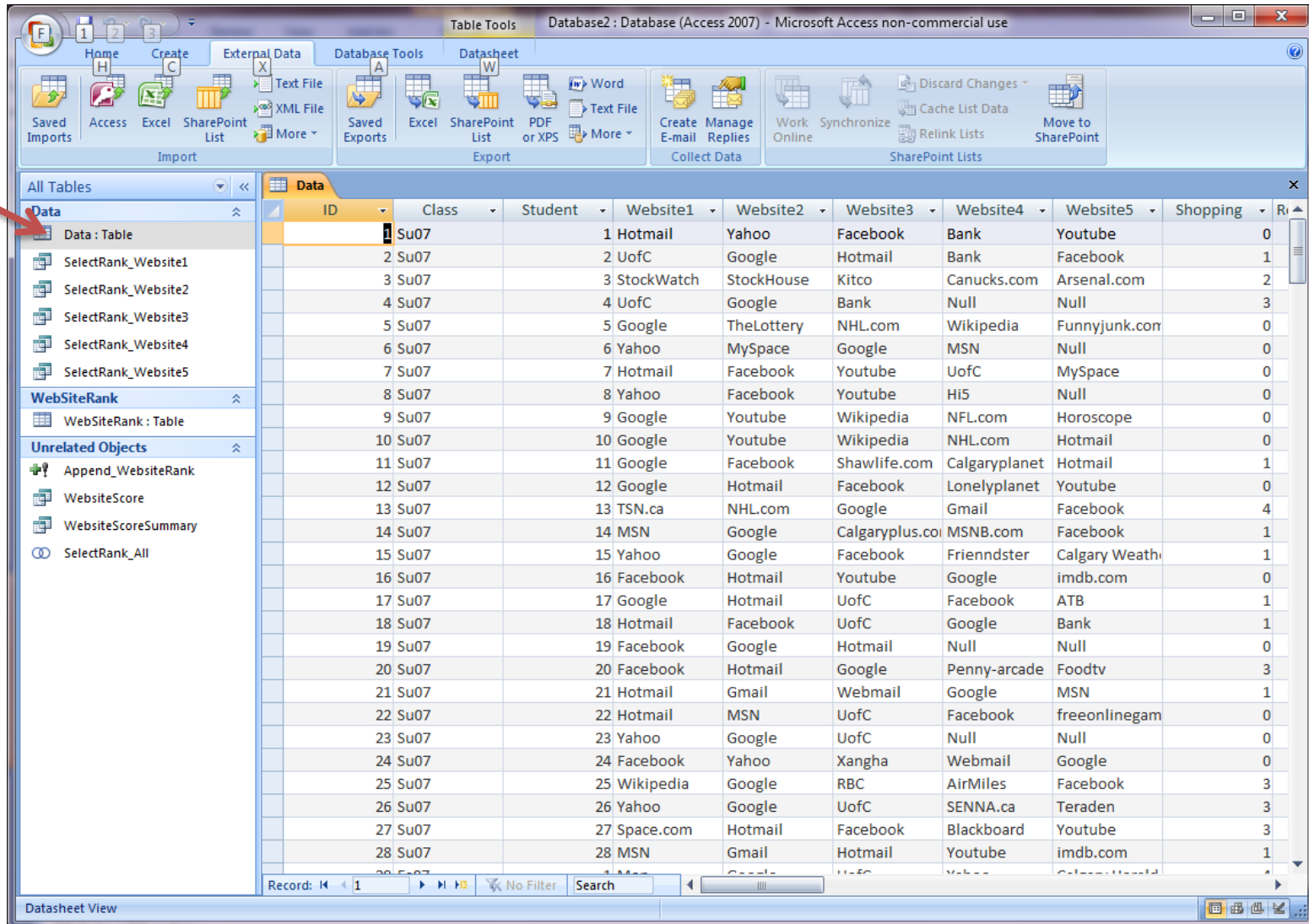
Step 1: Import data to MS Access

- Select the file (i.e. test.xlsx)

Step 2: Verify Imported Content

Step 3: Create a new Table

Field Name	Data Type
WebsiteRankID	AutoNumber
StudentID	Number
WebsiteRank	Text
WebsiteName	Text

WebSiteRank

Step 4: Select Required Fields using Query

Step 4: Create Query to Get Required Fields

SelectRank_Website1		
Student	WebsiteRank	WebsiteName
1	Website1	Hotmail
2	Website1	UofC
3	Website1	StockWatch
4	Website1	UofC
5	Website1	Google

Data
*
🔑 ID
Class
Student
Website1
Website2

Field:	Student	WebsiteRank: "Website1"	WebsiteName: Website1
Table:	Data		Data
Sort:			

WebsiteRank: "Website1"

WebsiteName: Website1

Repeat Step 4 to Create similar queries

Student	WebsiteRank	WebsiteName
SelectRank_Website1	SelectRank_Website2	
1	Website2	Yahoo
2	Website2	Google
3	Website2	StockHouse
4	Website2	Google
5	Website2	TheLottery
6	Website2	MySpace

Student	WebsiteRan	WebsiteNan
SelectRank_Website1	SelectRank_Website2	SelectRank_Website3
1	Website3	Facebook
2	Website3	Hotmail
3	Website3	Kitco
4	Website3	Bank
5	Website3	NHL.com
6	Website3	Google

SelectRank_Website4

Student	WebsiteRan	WebsiteNan
1	Website4	Bank
2	Website4	Bank
3	Website4	Canucks.com
4	Website4	Null
5	Website4	Wikipedia
6	Website4	MSN

11

Step 5: Merge Data into One Query

SelectRank_All		
Student	WebsiteRan	WebsiteNan
1	Website1	Facebook
1	Website1	Hotmail
1	Website1	Men
1	Website2	Google
1	Website2	Yahoo
1	Website2	Youtube
1	Website3	Beyond
1	Website3	Facebook
1	Website3	UofC
1	Website4	Bank
1	Website4	NFL.com
1	Website4	Yahoo
1	Website5	Calgary Herald
1	Website5	Hypebeast

```
SELECT * FROM
SelectRank_Website1
UNION
SELECT * FROM
SelectRank_Website2;
UNION
SELECT * FROM
SelectRank_Website3;
UNION
SELECT * FROM
SelectRank_Website4;
UNION
SELECT * FROM
SelectRank_Website5;
```

Step 6: Create Query to Copy Data into New Table

WebsiteRank Table After Copying Data

WebsiteRan	StudentID	WebsiteRan	WebsiteNan
1	1	Website1	Facebook
2	1	Website1	Hotmail
3	1	Website1	Men
4	1	Website2	Google
5	1	Website2	Yahoo
6	1	Website2	Youtube
7	2	Website1	Facebook
8	2	Website1	Google

14

How Can We Get the Scores?

WebSiteRank

WebsiteRan ⌄	StudentID ⌄	WebsiteRan ⌄	WebsiteNan ⌄
1	1	Website1	Facebook
2	1	Website1	Hotmail
3	1	Website1	Me
4	1	Website2	Go
5	1	Website2	Yah
6	1	Website2	You
7	2	Website1	Fac
8	2	Website1	Go

WebsiteScoreSummary

Score ⌄	WebsiteName
208	Facebook
184	Google
140	Hotmail
93	UofC
54	Yahoo
47	MSN
45	Youtube
39	Wikipedia
32	Null
27	NHL.com
19	Gmail
16	Bank
12	BlackBoard
9	Webmail
9	NBA.com
7	Dictionary.com

Website1 ⌄	Website2 ⌄	Website3 ⌄	Website4 ⌄	Website5 ⌄
Hotmail	Yahoo	Facebook	Bank	Youtube
UofC	Google	Hotmail	Bank	Facebook

5 4 3 2 1

Step 7: Create New Field for Score
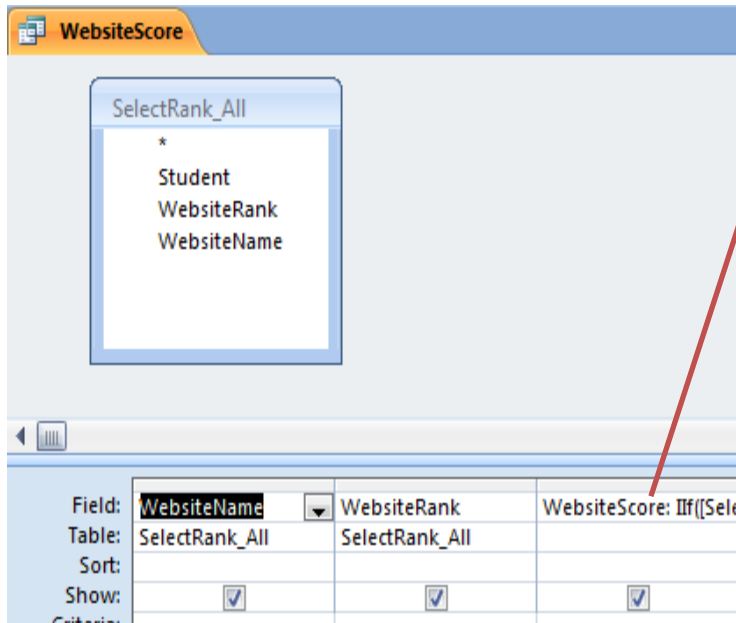

```
WebsiteScore:

IIf([WebsiteRank]="Website1",5,

IIf([WebsiteRank]="Website2",4,

IIf([WebsiteRank]="Website3",3,

IIf([WebsiteRank]="Website4",2,

1))))
```

Note: When you have multiple tables, you need to define the table name too.

```
IIf([SelectRank_All]![WebsiteRank]="Website4",2,1))))
```

Output of *WebsiteScore* Query

WebsiteScore

WebsiteName	WebsiteRank	WebsiteScore
Facebook	Website1	5
Hotmail	Website1	5
Men	Website1	5
Google	Website2	4
Yahoo	Website2	4
Youtube	Website2	4
Beyond	Website3	3
Facebook	Website3	3
UofC	Website3	3

Step 8: Show Total Score by Website