JCR QUERIES

A PRACTICAL OVERVIEW

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STORAGE BACKEND GRAPH

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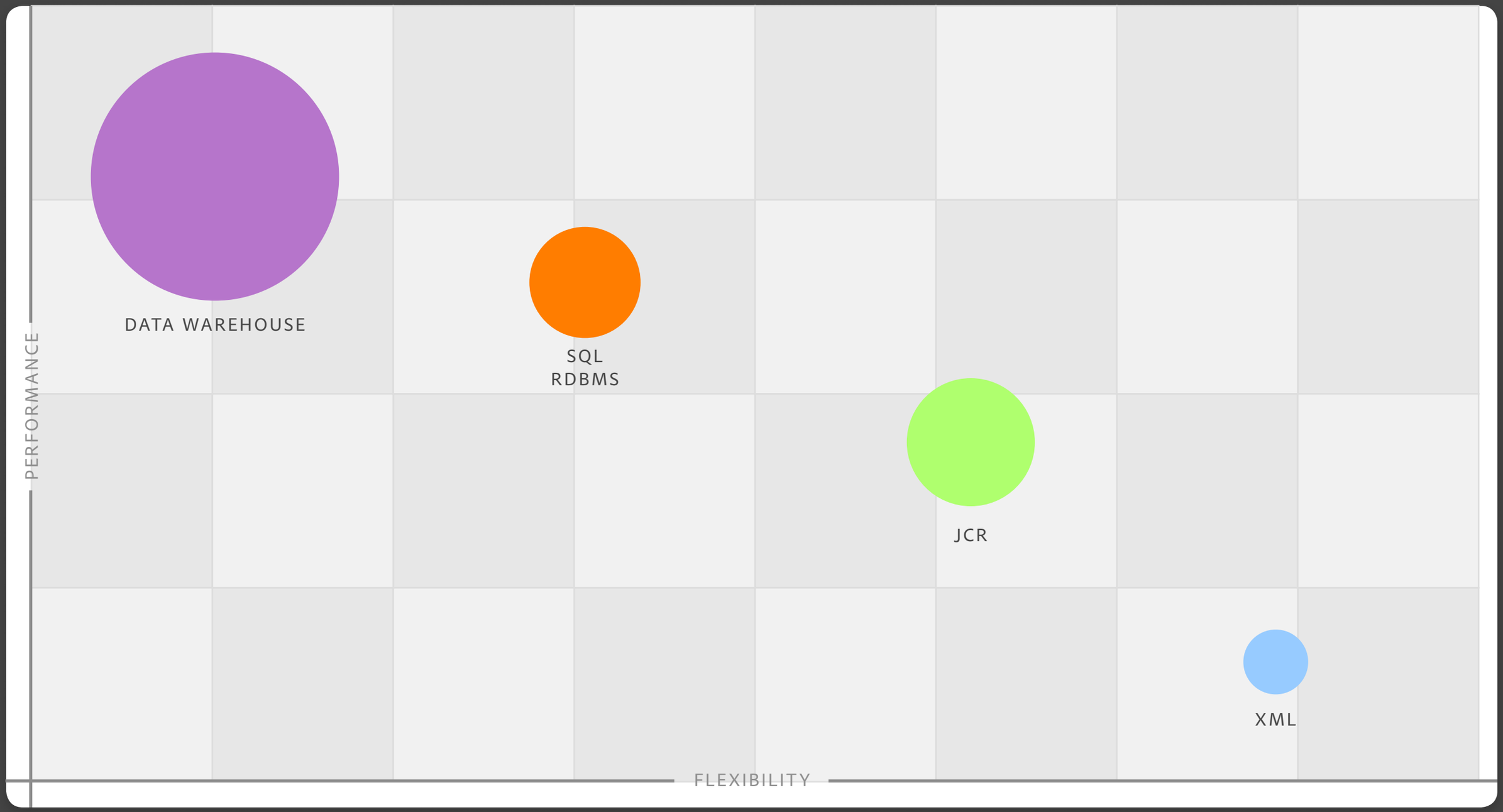

JCR CONCEPTS

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DAVID'S MODEL

DATA FIRST, STRUCTURE LATER. MAYBE

DRIVE THE CONTENT HIERACHY

ID IS EVIL

REFERENCES CONSIDERED HARMFUL

JCR ENTITIES SHOULD NOT ALWAYS BE TREATED AS FILE SYSTEMS EQUIVALENTS

SQL - JCR COMPARISON

Tree structure must be saved as flat structure with parent-child references - Tree structures supported natively

Entity schema must be clearly defined - Entity schema can be defined as precisely as user wants - from strict field list to freeform nt:unstructured type

Preferred strict relations with foreign keys and integrity check - Strict relations possible (using Reference and Weak Reference) but path relations preferred in most solutions

Queries based on indexes, full text search available in some databases - Queries based on Lucene full text indexes

SOURCE OF KNOWLEDGE

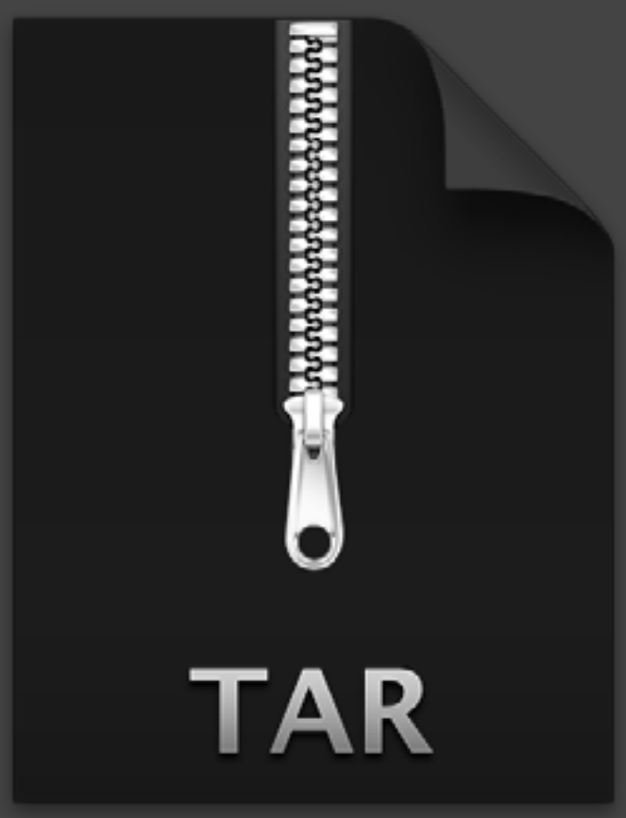
HTTP://SVN.APACHE.ORG/VIEWVC/JACKRABBIT/TRUNK/JACKRAB-BIT-SPI-COMMONS/SRC/TEST/RESOURCES/ORG/APACHE/JACKRABBIT/SPI/COMMONS/QUERY/SQL2/TEST.SQL2.TXT?VIEW=MARKUP

```
# 6.7.1 Query (p 99)
select * from test
SELECT * FROM TEST
SeLeCt * FrOm test
select * from test where id=1
select * from test where id=1 order by id
select * from test order by id

# 6.7.2 Source (p 99)
# 6.7.3 Selector (p 100)
# 6.7.4 Name (p 100)
select * from test as t
select * from ["Test"]
select * from [test]
select * from [test] as [t]
select * from test as ["t"]
select * from ["test"] as ["t"]

# 6.7.5 Join (p 102)
# 6.7.6 JoinType (p 102)
# 6.7.7 JoinCondition (p 103)
# 6.7.8 EquiJoinCondition (p 103)
select * from parent inner join child on parent.id=child.parentid
select * from parent as p inner join child as c on p.id=c.parentid
select * from parent as p inner join child as c on p.id=c.parentid
select * from parent as p left outer join child as c on p.id=c.parentid
select * from parent as p right outer join child as c on p.id=c.parentid
```

TAR PM VS SQL PM



DESCRIPTION OF THE TEST SCENARIO

`Category`

(P)	id	int(11)
N	name DEFAULT NULL	varchar(100)
N	path DEFAULT NULL	varchar(1000)

`Tag`

N	product_id DEFAULT NULL	int(11)
N	name DEFAULT NULL	varchar(100)

`Property`

N	product_id DEFAULT NULL	int(11)
N	variant_id DEFAULT NULL	int(11)
N	name DEFAULT NULL	varchar(100)
N	intFalue DEFAULT NULL	int(11)
N	floatValue DEFAULT NULL	float
	dateValue DEFAULT CURRENT_TIMESTAMP	timestamp
N	stringValue DEFAULT NULL	varchar(1000)
N	boolValue DEFAULT NULL	tinyint(1)

`Manufacturer`

(P)	id	int(11)
N	path DEFAULT NULL	varchar(1000)
N	name DEFAULT NULL	varchar(100)
N	address DEFAULT NULL	varchar(100)
N	city DEFAULT NULL	varchar(100)
N	phone DEFAULT NULL	varchar(100)
N	email DEFAULT NULL	varchar(100)
N	freeShipment DEFAULT NULL	tinyint(1)

`product`

(P)	id	int(11)
N	category_id DEFAULT NULL	int(11)
N	name DEFAULT NULL	varchar(100)
N	description DEFAULT NULL	varchar(10000)
N	manufacturer_id DEFAULT NULL	int(11)

`Variant`

(P)	id	int(11)
N	product_id DEFAULT NULL	int(11)
N	name DEFAULT NULL	varchar(100)

Everything can go wrong
when demoing live.

Please be forgiving.

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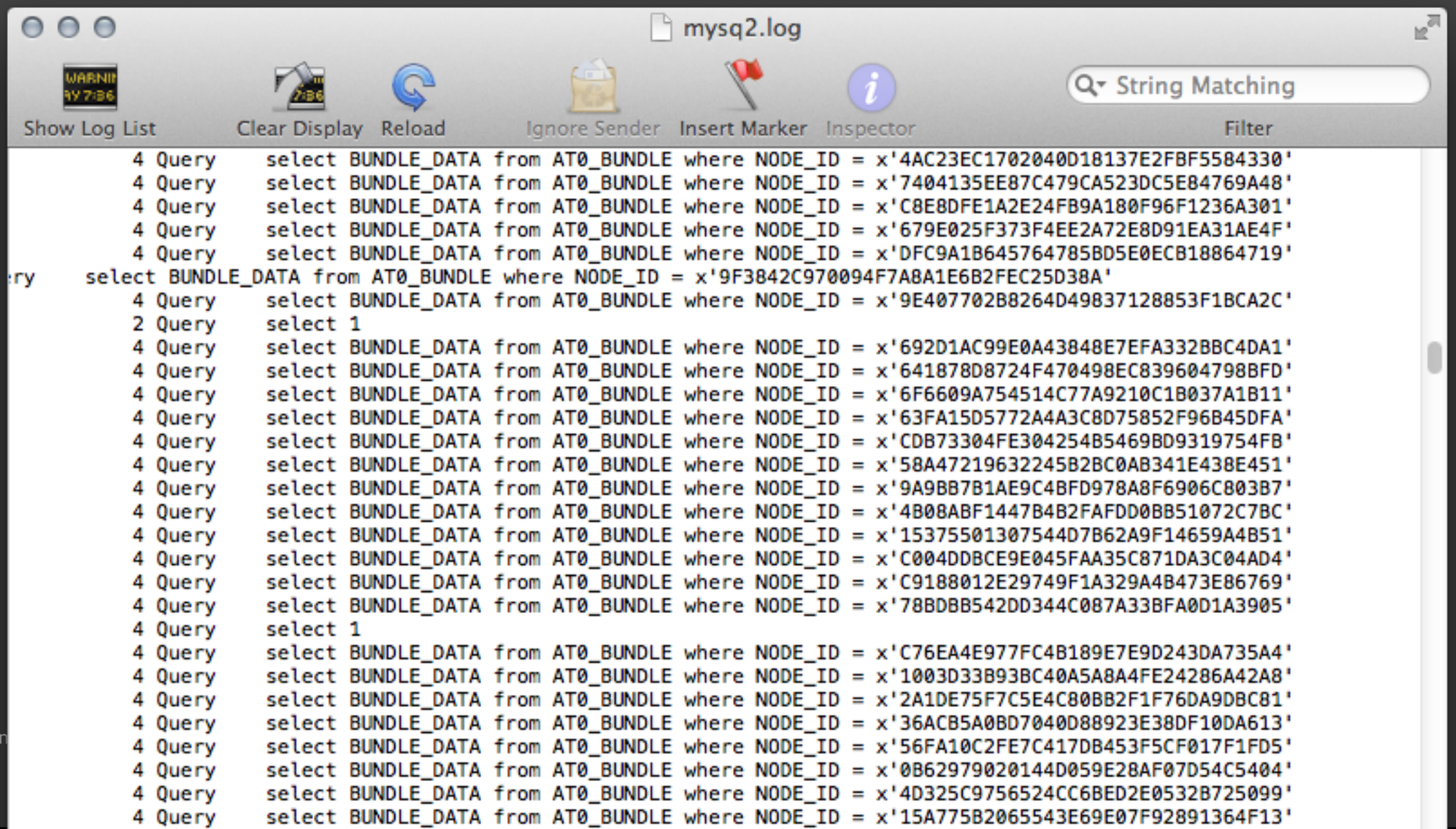
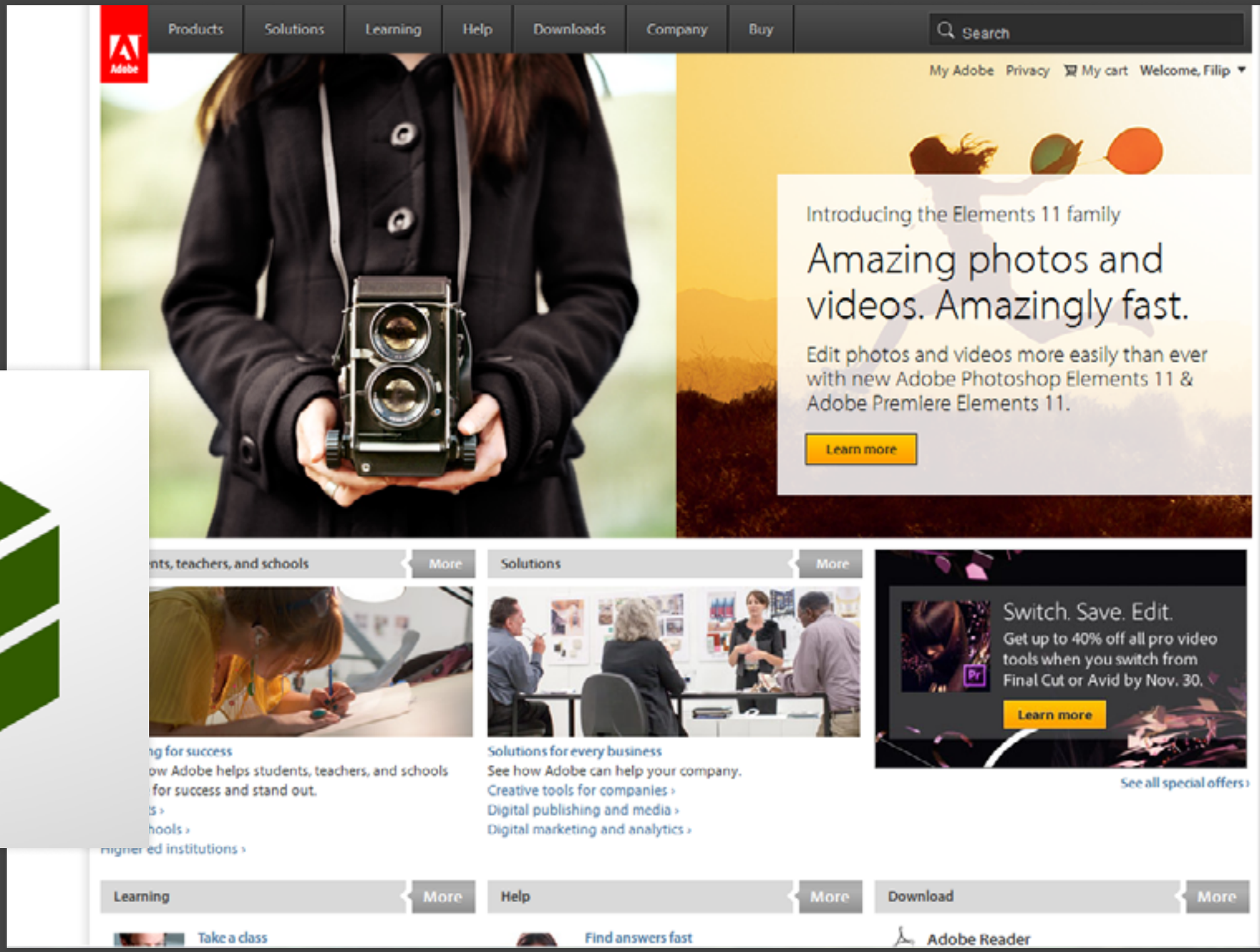
UNDER THE HOOD



THE PROOF OF JCR POWER



THANK YOU
AND **GOOD LUCK**
WITH JCR QUERIES!

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