

JDBC

Introduction

Java DataBase Connectivity (JDBC)

- accesses the data from the relational database
- relational database organizes data into **tables** consisting of **rows** and **columns**
 - this is how JDBC will access and process the data
- to interact with relational database we use SQL (**S**tructured **Q**uery **L**anguage)
- there are many dialects (flavors of SQL)
 - e.g. PostgreSQL, MySQL, SQLite, Oracle SQL, Apache Derby, H2, etc.
- you don't need to know any specific dialect for the exam
 - you'll encounter only simple queries which are self-explanatory

Create, Read, Update, Delete (CRUD)

- there are four basic operations one can do on a relational database:

CREATE : inserts a new row into the table

SELECT : retrieves (reads) data from the table

UPDATE : changes data in 0 or more rows in the table

DELETE : deletes 0 or more rows from the table

Sample Table in Relational Database

id	first_name	last_name	email	phone_number
1	Marthena	Worms	mworms0@stumbleupon.com	379-764-5644
2	Marlane	Bullant	mbullant1@theforest.net	423-916-8251
3	Godfrey	Cheasman	gcheasman2@ucsd.edu	674-547-9738
4	Charlot	McFall	cmcfall3@networkadvertising.org	694-697-5072
5	Zita	Leggott	zleggott4@deliciousdays.com	868-809-0618
6	Parnnell	Daniellot	pdaniellot5@ox.ac.uk	981-280-9926
7	Aloysia	Critchlow	acritchlow6@reference.com	713-463-3562
8	Shelba	Benham	sbenham7@newyorker.com	299-775-1912
9	Constancia	Chatband	cchatband8@columbia.edu	631-280-6067
10	Dynah	Garford	dgarford9@accuweather.com	824-783-5252