

# Lab-1

CSE- 302

**Database Management  
System Sessional**

# Oracle Database

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An object-relational database can be said to provide a middle ground between ***relational databases*** and ***object-oriented databases***.

*Relational database is a digital database whose organization is based on the relational model of data.*

*An object database is a database management system in which information is represented in the form of objects as used in object-oriented programming.*

# History

*In 1977, Larry Ellison, Bob Miner, and Ed Oates started oracle as RSI(Relational Software, Inc).*

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*In 1983, RSI became Oracle Systems Corporation and then later Oracle Corporation.*

The name *Oracle* comes from the code-name of a CIA (**Central Intelligence Agency**)

# Cont...

- **The Oracle RDBMS** stores data logically in the form of **tablespaces** and physically in the form of **data files**.
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- Every Oracle database has a **control file**. Contains Physically structure information.
- Every Oracle database has a set of two or more **redo log files**. Used only to recover the database from a system or media failure.
- Oracle DB runs on most major platforms, including Windows, UNIX, Linux and Mac OS



# Cont...

- Different software versions are available, based on requirements and other features like:



# Cont...

- Different software versions are available, based on requirements and other features like:
  - Enterprise Edition: Offers all features, including superior performance and security, and is the most robust.
  - Standard Edition: Contains base functionality for users that do not require Enterprise Edition's robust package
  - Express Edition (XE): The lightweight, free and limited Windows and Linux edition
  - Oracle Lite: For mobile devices

# Cont...

- Oracle Database software comes in 63 language-versions.
- Oracle Corporation has translated Oracle Database error-messages into several languages.
- Oracle Corporation provides database developers with tools and mechanisms for producing internationalized database applications.
- In 2016 the latest Oracle Database (12.1.0.2) comes in two editions:
  - Oracle Database 12c **Enterprise Edition** (EE)
  - Oracle Database 12c **Standard Edition 2** (SE2)

# Oracle 11g Installation

| Name  | Date modified      | Type                | Size       |
|---|--------------------|---------------------|------------|
|  OracleXE112_Win32     | 1/28/2017 12:10 AM | File folder         |            |
|  OracleXE112_Win32.zip | 1/11/2017 10:36 PM | Compressed (zipp... | 319,669 KB |

Oracle Database 11g Express Edition - Install Wizard



**Welcome to the InstallShield Wizard for Oracle  
Database 11g Express Edition**

The InstallShield® Wizard will install Oracle Database 11g Express Edition on your computer. To continue, click Next.

**ORACLE®**  
**D A T A B A S E**  
EXPRESS EDITION

Back

Next

Cancel

## Oracle Database 11g Express Edition - Install Wizard



### License Agreement

Please read the following license agreement carefully.



### Oracle Technology Network Developer License Terms for Oracle Database Express Edition

#### Export Controls

Export laws and regulations of the United States and any other relevant local export laws and regulations apply to the programs. You agree that such export control laws govern your use of the Program (including technical data) and any services deliverables provided under this agreement, and you agree

- ☐ I accept the terms in the license agreement
- ☒ I do not accept the terms in the license agreement

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## Oracle Database 11g Express Edition - Install Wizard



### Choose Destination Location

Select folder where setup will install files.



Setup will install Oracle Database 11g Express Edition in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

☒ Oracle Database 11g Express Edition 563556 K

Destination Folder

C:\oraclexe\

Browse...

Space Required on C: 563556 K

Space Available on C: 52157728 K

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Next

Cancel



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Space Required on C: 563556 K

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Choose  
installation  
directory

Oracle Database 11g Express Edition - Install Wizard



**Specify Database Passwords**



Enter and confirm passwords for the database. This password will be used for both the SYS and the SYSTEM database accounts.

Enter Password

Confirm Password

InstallShield

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Cancel

Oracle Database 11g Express Edition - Install Wizard



**Specify Database Passwords**

ORACLE  
DATABASE  
EXPRESS EDITION

Enter and confirm passwords for the database. This password will be used for both the SYS and the SYSTEM database accounts.

Enter Password

Confirm Password

Enter your  
system password

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Cancel

## Oracle Database 11g Express Edition - Install Wizard



### Summary

Review settings before proceeding with the installation.



#### Current Installation Settings:

Destination Folder: C:\oraclexe\  
Oracle Home: C:\oraclexe\app\oracle\product\11.2.0\server\  
Oracle Base: C:\oraclexe\  
Port for 'Oracle Database Listener': 1521  
Port for 'Oracle Services for Microsoft Transaction Server': 2030  
Port for 'Oracle HTTP Listener': 8080

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Install

Cancel

Oracle Database 11g Express Edition - Install Wizard

**InstallShield Wizard Complete**

Setup has finished installing Oracle Database 11g Express Edition on your computer.

**ORACLE®**  
**DATABASE**  
EXPRESS EDITION

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Finish

Cancel

# ORACLE' Application Express



Enter Application Express workspace and credentials.

Workspace

Username

Password

Login

[Click here to learn how to get started](#)

Oracle Application Express is a rapid Web application development tool that lets you share data and create custom applications. Using only a Web browser and limited programming experience, you can develop and deploy powerful applications that are both fast and secure.

# ORACLE' Application Express



Enter Application Express workspace and credentials.

Workspace

Username

Password

Login

[Click here to learn how to get started](#)

Enter User name

Enter Password

Oracle Application Express is a rapid Web application development tool that lets you share data and create custom applications. Using only a Web browser and limited programming experience, you can develop and deploy powerful applications that are both fast and secure.

# User Creation

- create user *user\_name* identified by '*password*'
- grant create session, create table, create view to *user\_name*
- alter user *user\_name* default tablespace users  
quota 5m on users



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Workspace ABC

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Rows

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Enter SQL statement or PL/SQL command and click Run to see the results.

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Rows

10 ▼

[Save](#)[Run](#)

```
select * from dept;
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

| DEPTNO | DNAME      | LOC      |
|--------|------------|----------|
| 10     | ACCOUNTING | NEW YORK |
| 20     | RESEARCH   | DALLAS   |
| 30     | SALES      | CHICAGO  |
| 40     | OPERATIONS | BOSTON   |

# Course website

<https://sites.google.com/site/mistcsecourses/cse302dbmssessional2017>