

به نام خدا

گزارش شماره ۷

آزمایشگاه پایگاه داده ها

سامان فکری

۹۲۳۱۰۷۵

سجاد اعظمی

۹۲۳۱۰۳۱

ابتدا یک ادمین را می‌سازیم

Oracle Enterprise Manager - Create User - Windows Internet Explorer

https://192.168.233.130:1158/em/console/database/security/User/event=create?cancelURL=%2Fem%2Fconsole%2Fdatabase%2Fd... Certificate Error Live Search

File Edit View Favorites Tools Help

Oracle Enterprise Manager - Create User

ORACLE Enterprise Manager 11g Database Control

Database Instance: orcl168.233.130 > Users > Create User

Logged in As SYS

Show SQL Cancel OK

General Roles System Privileges Object Privileges Quotas Consumer Group Privileges Proxy Users

* Name: root

Profile: DEFAULT

Authentication: Password

* Enter Password: ***

* Confirm Password: ***

For Password choice, the role is authorized via password.

☐ Expire Password now

Default Tablespace: [lock icon]

Temporary Tablespace: [lock icon]

Status: ☐ Locked ☒ Unlocked

Show SQL Cancel OK

Database | Setup | Preferences | Help | Logout

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سپس به ادمینی که ساختیم دسترسی های زیر را می‌دهیم

Oracle Enterprise Manager - Create User - Windows Internet Explorer

https://192.168.233.130:1158/em/console/database/security/User/target=orcl168.233.130?pre=Oracle_Database%2Fem%2F... Certificate Error Live Search

File Edit View Favorites Tools Help

Oracle Enterprise Manager - Create User

ORACLE Enterprise Manager 11g Database Control

Database Instance: orcl168.233.130 > Users > Create User

Logged in As SYS

Show SQL Cancel OK

General Roles System Privileges Object Privileges Quotas Consumer Group Privileges Proxy Users

(Edit List)

Role	Admin Option	Default
CONNECT	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DBA	<input type="checkbox"/>	<input checked="" type="checkbox"/>
LBAC_DBA	<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Roles System Privileges Object Privileges Quotas Consumer Group Privileges Proxy Users

Show SQL Cancel OK

Database | Setup | Preferences | Help | Logout

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سپس جداول گفته شده را می‌سازیم و constraint های مربوط به هر یک از attribute های آن را تنظیم می‌کنیم و primary key و foreign key های هر جدول را که توسط diagram بدست آوردیم می‌گذاریم

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Instance: orcl168.233.130 > Tables > View Table: ROOT.COURSE

Actions: Create Like Go Edit OK

General

Name: COURSE
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
C_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
C_NAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
C_DEP	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
C_NUM	NUMBER	10		<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table	Columns	Disabled	Deferrable	Initially	Deferred	Validate	RELY	Check	Condition	Referenced	Schema	Referenced	Table	Referenced	Table	Columns	Cascade on Delete
SYS_C0011061	PRIMARY	C_ID		NO	NO	NO		YES	NO										NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011061	C_ID	1

Storage

Tablespace: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM
Logging: Yes

Space Usage

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Instance: orcl168.233.130 > Tables > View Table: ROOT.DEPARTMENT

Actions: Create Like Go Edit OK

General

Name: DEPARTMENT
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
DEP_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
DEP_NAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
DEP_DATE	DATE			<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table	Columns	Disabled	Deferrable	Initially	Deferred	Validate	RELY	Check	Condition	Referenced	Schema	Referenced	Table	Referenced	Table	Columns	Cascade on Delete
SYS_C0011072	PRIMARY	DEP_ID		NO	NO	NO		YES	NO										NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011072	DEP_ID	1

Storage

Tablespace: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM
Logging: Yes

Space Usage
Free Space (PCTFREE)(%) 10

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Control

Database Instance: orcl168.233.130 > Tables >

View Table: ROOT.MEMBER

Actions: Create Like Go Edit OK

General

Name: MEMBER
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
DEP_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
T_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
SALARY	NUMBER	10		<input type="checkbox"/>		<input type="checkbox"/>
PASSWORD	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially	Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011071	PRIMARY	DEP_ID, T_ID	NO	NO	NO	NO	YES	NO					NO
SYS_C0011075	FOREIGN	DEP_ID	NO	NO	NO	NO	YES	NO		ROOT	DEPARTMENT	DEP_ID	NO
SYS_C0011076	FOREIGN	T_ID	NO	NO	NO	NO	YES	NO		ROOT	TEACHER	T_ID	NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011071	DEP_ID T_ID	1 2

Storage

Tablespace: USERS
Extent Management: Local
Segment Management: Automatic

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Control

Database Instance: orcl168.233.130 > Tables >

View Table: ROOT.PROJECT

Actions: Create Like Go Edit OK

General

Name: PROJECT
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
C_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
PROJ_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
DEF_PROJ	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
MEMBER	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
PROJ_DEADLINE	DATE			<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially	Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011063	PRIMARY	C_ID, PROJ_ID	NO	NO	NO	NO	YES	NO					NO
SYS_C0011064	FOREIGN	C_ID	NO	NO	NO	NO	YES	NO		ROOT	COURSE	C_ID	NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011063	C_ID PROJ_ID	1 2

Storage

Tablespace: USERS
Extent Management: Local
Segment Management: Automatic

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Instance: orcl.168.233.130 > Tables > View Table: ROOT.PUBLICATION

Actions: Create Like Go Edit OK

General

Name: PUBLICATION
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
T_ID	NUMBER	10		<input type="checkbox"/>		<input type="checkbox"/>
BOOK_NAME	VARCHAR2	255		<input checked="" type="checkbox"/>		<input type="checkbox"/>
PUBLISH_DATE	DATE			<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011073	PRIMARY	BOOK_NAME	NO	NO	NO	YES	NO		ROOT	TEACHER	T_ID	NO
SYS_C0011077	FOREIGN	T_ID	NO	NO	NO	YES	NO					NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011073	BOOK_NAME	1

Storage

Tablespace

Name: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM
Logging: Yes

Space Usage

Oracle Enterprise Manager - Table View - Windows Internet Explorer

Database Instance: orcl.168.233.130 > Tables > View Table: ROOT.REGISTER

Actions: Create Like Go Edit OK

General

Name: REGISTER
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
S_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
C_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
GRADE	NUMBER	2		<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011059	PRIMARY	S_ID, C_ID	NO	NO	NO	YES	NO		ROOT	STUDENT	S_ID	NO
SYS_C0011060	FOREIGN	S_ID	NO	NO	NO	YES	NO		ROOT	COURSE	C_ID	NO
SYS_C0011062	FOREIGN	C_ID	NO	NO	NO	YES	NO					NO

Indexes

Number of Indexes: 1

Schema	Index	Indexed Columns	Column Position
ROOT	SYS_C0011059	S_ID	1
		C_ID	2

Storage

Tablespace

Name: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM
Logging: Yes

Oracle Enterprise Manager 11g Database Control

Database Instance: orcl168.233.130 > Tables > View Table: ROOT.STUDENT

Actions: Create Like Go Edit OK

General

Name: STUDENT
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
S_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
S_NAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
S_FNAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
S_TEL	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
S_ADDRESS	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
S_DEP	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011058	PRIMARY	S_ID	NO	NO	NO	YES	NO					NO

Indexes

Number of Indexes: 1

Schema/Index	Indexed Columns	Column Position
ROOT.SYS_C0011058	S_ID	1

Storage

Tablespace

Name: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM

Oracle Enterprise Manager 11g Database Control

Database Instance: orcl168.233.130 > Tables > View Table: ROOT.TEACHER

Actions: Create Like Go Edit OK

General

Name: TEACHER
Schema: ROOT
Tablespace: USERS
Organization: Standard (Heap Organized)

Columns

Name	Data Type	Size	Scale	Not NULL	Default Value	Encrypted
T_ID	NUMBER	10		<input checked="" type="checkbox"/>		<input type="checkbox"/>
T_NAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
T_FNAME	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
T_TEL	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>
T_ADDRESS	VARCHAR2	255		<input type="checkbox"/>		<input type="checkbox"/>

Indicates a Primary Key column
Indicates a Unique Key column
Indicates a SecureFile LOB column

Constraints

Name	Type	Table Columns	Disabled	Deferrable	Initially Deferred	Validate	RELY	Check Condition	Referenced Schema	Referenced Table	Referenced Table Columns	Cascade on Delete
SYS_C0011070	PRIMARY	T_ID	NO	NO	NO	YES	NO					NO

Indexes

Number of Indexes: 1

Schema/Index	Indexed Columns	Column Position
ROOT.SYS_C0011070	T_ID	1

Storage

Tablespace

Name: USERS
Extent Management: Local
Segment Management: Automatic
Allocation Type: SYSTEM
Logging: Yes

سپس role های مختلف را می‌سازیم و به آن‌ها دسترسی داده شده را می‌دهیم

Oracle Enterprise Manager 11g - View Role: STUDENT - Windows Internet Explorer

Database Control

Database Instance: orcl.168.233.130 > Roles > View Role: STUDENT

Logged in As ROOT

Actions: Create Like Go Edit Return

General

Name: STUDENT
Authentication: None

Roles

Role	Admin Option
No items found	

System Privileges

System Privilege	Admin Option
No items found	

Object Privileges

Object Privilege	Schema	Object
SELECT	ROOT	STUDENT_UPDATE
UPDATE	ROOT	STUDENT_UPDATE
SELECT	ROOT	STUDENT_VIEW

Consumer Group Privileges

Consumer Group
No items found

Actions: Create Like Go Edit Return

Database | Help | Logout

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Oracle Enterprise Manager 11g - View Role: EDUCATION_MANAGER - Windows Internet Explorer

Database Control

Database Instance: orcl.168.233.130 > Roles > View Role: EDUCATION_MANAGER

Logged in As ROOT

Actions: Create Like Go Edit Return

General

Name: EDUCATION_MANAGER
Authentication: None

Roles

Role	Admin Option
No items found	

System Privileges

System Privilege	Admin Option
No items found	

Object Privileges

Object Privilege	Schema	Object
DELETE	ROOT	EDUCATIONAL_MANAGER
INSERT	ROOT	EDUCATIONAL_MANAGER
SELECT	ROOT	EDUCATIONAL_MANAGER
UPDATE	ROOT	EDUCATIONAL_MANAGER

Consumer Group Privileges

Consumer Group
No items found

Actions: Create Like Go Edit Return

Database | Help | Logout

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Oracle Enterprise Manager - View Role: TEACHER - Windows Internet Explorer

https://192.168.233.130:1158/em/console/database/security/role?oname=TEACHER&event=view&cancelURL=/em/console/database/... Certificate Error Live Search

File Edit View Favorites Tools Help

Suggested Sites Web Slice Gallery

Oracle Enterprise Manager (...) Oracle Enterprise Manag...

Page Safety Tools

ORACLE Enterprise Manager 11g Database Control [Help](#) [Logout](#)

Database Instance: ord168233130 > [Roles](#) > Logged in As ROOT

View Role: TEACHER

Actions [Create Like](#) [Go](#) [Edit](#) [Return](#)

General

Name **TEACHER**

Authentication **None**

Roles

Role	Admin Option
No items found	

System Privileges

System Privilege	Admin Option
No items found	

Object Privileges

Object Privilege	Schema	Object
UPDATE	ROOT	CHECK_UPDATE_VIEW
SELECT	ROOT	TECHER_COURSES_VIEW

Consumer Group Privileges

Consumer Group
No items found

Actions [Create Like](#) [Go](#) [Edit](#) [Return](#)

[Database](#) | [Help](#) | [Logout](#)

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start Oracle Enterprise Ma... My Computer untitled - Paint Internet 100% 3:40 PM

سپس یک instance برای آن student و teacher می‌سازیم

Oracle Enterprise Manager - View User: 9231058 - Windows Internet Explorer

https://192.168.233.130:1158/em/console/database/security/user?oname=9231058&event=view&cancelURL=/em/console/database/d... Certificate Error Live Search

File Edit View Favorites Tools Help

Oracle Enterprise Manager - View User: 9231058

ORACLE Enterprise Manager 11g Database Control

Database Instance: orcl.168.233.130 > Users > View User: 9231058

Help Logout Database

Logged in As ROOT

Actions Create Like Go Edit Return

General

Name 9231058
Profile DEFAULT
Authentication Password
Default Tablespace USERS
Temporary Tablespace TEMP
Status UNLOCK
Default Consumer Group None

Roles

Role	Admin Option	Default
CONNECT	N	Y
STUDENT	N	Y

System Privileges

System Privilege	Admin Option
CREATE SESSION	N

Object Privileges

Object Privilege	Schema	Object	Grant Option
No items found			

Quotas

Tablespace	Quota	Value	Unit
No items found			

Consumer Group Privileges

Consumer Group	Admin Option
No items found	

Proxy Users

User

Done

start Oracle Enterprise Ma... My Computer untitled - Paint Internet 100% 3:42 PM

Oracle Enterprise Manager - View User: 003 - Windows Internet Explorer

https://192.168.233.130:1158/em/console/database/security/user?oname=003&event=view&cancelURL=/em/console/database/datab... Certificate Error Live Search

File Edit View Favorites Tools Help

Oracle Enterprise Manager - View User: 003

ORACLE Enterprise Manager 11g Database Control

Database Instance: orcl.168.233.130 > Users > View User: 003

Help Logout Database

Logged in As ROOT

Actions Create Like Go Edit Return

General

Name 003
Profile DEFAULT
Authentication Password
Default Tablespace USERS
Temporary Tablespace TEMP
Status UNLOCK
Default Consumer Group None

Roles

Role	Admin Option	Default
CONNECT	N	Y
TEACHER	N	Y

System Privileges

System Privilege	Admin Option
CREATE SESSION	N

Object Privileges

Object Privilege	Schema	Object	Grant Option
No items found			

Quotas

Tablespace	Quota	Value	Unit
No items found			

Consumer Group Privileges

Consumer Group	Admin Option
No items found	

Proxy Users

User

Done

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