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# Oracle Application Express Teacher Guide

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#### 1. Introduction

This document describes the administrative features of Oracle Application Express (APEX) that include instructions for teachers (with students) to create tables and add data to the APEX schemas provided by the Oracle Academy.

Teacher's APEX accounts allow teachers to review students' work in the Oracle Application Express environment. This document assumes you have used Oracle Application Express.

If you are not familiar with how to use Oracle Application express, please read the APEX Student Guide from Section 0 of the course that you are teaching.

In addition, documentation can be found by referencing the Oracle Application Express – SQL Workshop Guide: <u>https://docs.oracle.com/cd/E59726\_01/doc.50/e39150/toc.htm</u>

## 2. Requesting APEX accounts

To request student APEX accounts, access your Oracle Academy member account at academy.oracle.com. The request process can be found under Curriculum -> Application Express:

Curriculum / Oracle Application Express
Oracle Application Express
Oracle Application Express (APEX) is cloud-based software used for labs and practices in our Database Design and Programming with SQL and Programming with PL/SQL courses. APEX allows you and your students to create and delete database objects and develop applications.
Within APEX, you will work within assigned and pre-populated workspaces for which you will have administration rights. Most educators prefer to have a separate workspace for each course they teach. Within a SQL course workspace, all users will be able to see and modify any scripts created by other users in the same workspace. If this is a concern, please request a separate workspace for each separate workspace for each devices of the same workspace. If this is a concern, please request a separate workspace for each student or each project group.
APEX requires a separate account and password from your Oracle Academy membership and iLearning. This is true for your account and any related student accounts. You may request up to 99 student accounts per workspace.
Once created, Oracle Academy APEX accounts remain valid for one year or until your Oracle Academy membership expires, whichever occurs first. If your Oracle Academy membership remains in good standing for longer than one year after your APEX accounts are created, you will need to request new accounts and new workspaces.
<ul> <li>To request a new workspace, dick the "Request New Workspace" tab below.</li> <li>To request additional accounts, dick the "Request Additional Accounts" tab below.</li> </ul>
Request New Workspace     Request Additional Accounts
To request a new set of APEX accounts for the following course(s), enter the number of desired student accounts and click Submit.
Available APEX accounts:
SQL Submit
PL/SQL Submit

#### 3. Logging in to Oracle Application Express

Once you complete the request in step 2 above, you will receive an email with the APEX login names. You will receive a separate email with the temporary password that will be associated with <u>ALL</u> accounts.

The first time that each login is used, you (and your students) will be required to change the password. You should **<u>COPY AND PASTE</u>** the password provided in the email. More than three attempts to login with the incorrect password will result in your account being locked for security purposes.

Admin accounts must be reviewed, verified, and unlocked by Oracle Academy staff. This can take up to three business days. If an <u>Admin account</u> is locked, send an email to <u>academy ww@oracle.com</u> with the Workspace and Admin Username that is locked. If a <u>regular account</u> becomes locked, refer to "5. Changing Student Passwords," Step 7. After an account is unlocked, it is recommended that you clear your browser cache, exit the browser and restart the browser.

Teacher and Student workspaces include an **Admin login** (used to manage the regular login password and to view scripts and saved SQL queries), and a **regular login** to be used with the curriculum.







## 4. Changing a Teacher Password

You will be required to change your password the first time you access APEX. If you wish to change your password again at a later date:

- 1. Log into your account
- 2. Click the Administration icon
- 3. Click "Change my password"

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## 5. Changing Student Passwords

Teachers can change student passwords by following these steps:

- 1. Log into the student's ADMIN account
- 2. Click the Administration icon
- 3. Click "Manage Users and Groups"



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- 4. Click to select the student account.
- 5. Scroll down the page to the "Password" section.
- 6. Make sure Account is "Unlocked"
- 7. Type in the new password in the "Password" and the "Confirm Password" fields. Password rules: When you first login to each account, you must change the password to a unique password which contains at least 6 characters, with at least 1 numeric character, 1 upper-case alphabetic character and 1 punctuation character (!"#\$%&()``\*+,-/:;<=>?\_).

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Password Password Confirm Password Require Charge of Password on First Use Developer/Administrator Password Expire Password	Valid ()	Passwords are case sensitive () () ()		7

- 8. By default it is also mandatory to enter an email address. Use <u>user@user.com</u>.
- 9. Then click "Apply Changes".

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## 6. How to add tables and data to APEX accounts

In order to have access to the tables and data used throughout the course, a Script file that can be accessed from Oracle iLearning must be run in the teacher account and all student accounts.

The teacher should do this as a "run-through" with the class following the instructions below. This method insures that students understand, and can download and run the scripts in their own schemas.

- Download the script file from the Oracle iLearning Database Programming with SQL (or PL/SQL) course. Go to Section 0, Course Resources, click "APEX Scripts and User Guides", click "Script to Create Tables and Data for This Course," UNZIP the zip file, and save the script file locally on your PC.
- 2. Open APEX in your browser and login.
- 3. Select "SQL Workshop"

	Application Builder 💛	SQL Workshop 💛	Team Development 💛	Packaged Apps 💛		
Application Build	ler	s	QL Workshop		Team Development	
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		(	us_z101_sql_s01		1	

#### 4. Select "SQL Scripts"



## 5. Click "Upload"



6. Click Browse and navigate to the file you downloaded from Oracle iLearning in Step 1.



7. Add a Script Name - "SQL add all tables" or "PLSQL add all tables", leave "File Character Set" as default (Unicode UTF-8), and click "Upload".

		Uploa	d Script	ж
	- File	Browse. SQL,Sch	ma_ddl_and_pop_all_tables.sql 🕚	
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Cancel				Uphraid

8. You will now see the Script listed.

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Click the Run icon.

#### 9. Click "Run Now"



This will take you to the Manage Script Results Page.

10. Click "View Results"

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- 11. The first attempt will generate errors for the DROP statements due to the tables not already existing in the schema. These statements are necessary in the script, if it becomes necessary to restore the tables to the original state.
- 12. Click the "SQL Workshop" tab

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10	QL add all tables	US Z101 SQL 50	01	7 seconds ago	06/07/2016	6.30	Completed	7076210

#### 13. Click "Object Browser"

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Object Browser	SQL Commands	SQL Scripts
Recently Created Tables		Recent SQL Commands
No tables found		No 5QL commands found

14. You should now see the tables listed on the left of the Object Browser page. These are the tables (and data) that will be used in the curriculum for your course(s).

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NOTE: The Script can be run again at a later date to revert the schema to its original state in the event of a student accidently modifying or deleting data.

## 7. Viewing Student Schemas Using the SQL Command Processor

As a teacher, you cannot view your students' schemas from the SQL Workshop. To view a student's work you must logon to the student's ADMIN account which is provided for each student account. You will then be able to select the student account schema and view their saved queries and procedures.



### 8. Using the Command History to Review PL/SQL or SQL Statements

For a teacher to view the SQL history and/or progress of each student, s/he must log in as that student. The ADMIN accounts will not display history for the student account.

The history only keeps the 200 most recently executed commands.

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## 9. Checking Homework Assignments from the Script Repository

Logging in to the student ADMIN account will enable the teacher to view scripts saved by the student.

From the student ADMIN account, view scripts by selecting SQL Scripts from the SQL Workshop.



To narrow the list, type in the name of the files you are searching for in the Script text box

	Application	n Builde	$\odot$	SQL Workshop 😒	Team Development 🕑	Packaged Apps		Se -	· @~
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Q~	Go	88		Actions ~			Delete Checked	Upload >	Create >

(Another option for checking homework assignments is to instruct students to copy and paste SQL code and/or results, and then paste them into a word processing program to submit as evidence of completion.)

## 10. Browsing Student Database Objects

The teacher will have to logon to the student's ADMIN account to view objects in the student's schema. From the Object Browser of the student's ADMIN account, a teacher can view the student's database objects.

- 1. Click the SQL Workshop tab
- 2. Select the student account schema
- 3. Click on the Object Browser. The Objects for that student will display.

ORACL on Express A	SQL Workshop	Tam Development Packaged Apps	2	&
				About
Object Browser SQL	Commands SQL S	cripts Utilities	RESTful Services	The SQL Workshop provides tools to view and manage database objects. To create new database objects disk on the <b>Object</b> <b>Browser</b> icon then dick the <b>Create</b> button.
				Schema
Recently Created Tables		Recent SQL Commands		Select the default database
DEPARTMENTS	43 hours ago	SELECT * FROM locations:	3 hours ago	schema for your SQL Workshop session.
ices	43 hours ago	SELECT * FROM departments:	3 hours ago	
LOCATIONS 3	43 hours age	SELECT * FROM jobs:	3.600.000	US_Z101_SQL_S01   0   SH
COUNTRIES	43 hours ago	SELECT * FROM employees:	3 hours ago	Create Object
REGIONS	43 hours ago	select * from employees	45 hours ago	Table
OB_HISTORY	43 hours ago			View
OB_GRADES	43 hours ago			Index
				Sequence