



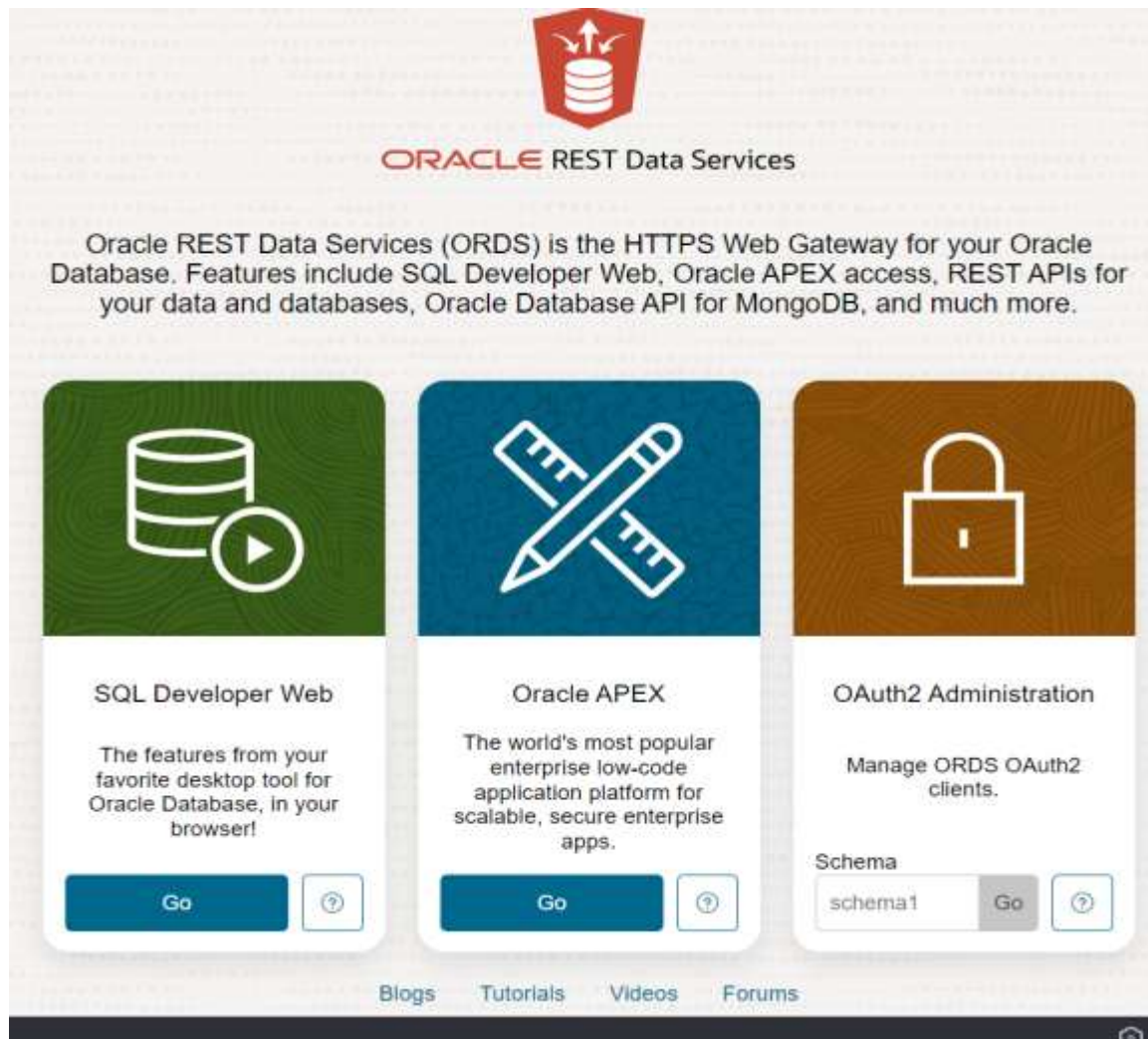
Laborator 1 – Oracle APEX

1) Prezentarea Aplicatiei ORACLE APEX

ORACLE APEX (Application Express) este o aplicatie cloud de dezvoltare a aplicațiilor cu baza de date Oracle.

Utilizarea **ORACLE APEX (Application Express)**:
<https://apex.oracle.com/pls/apex/ /landing>

Selectati Oracle APEX



Baze de date - SQL

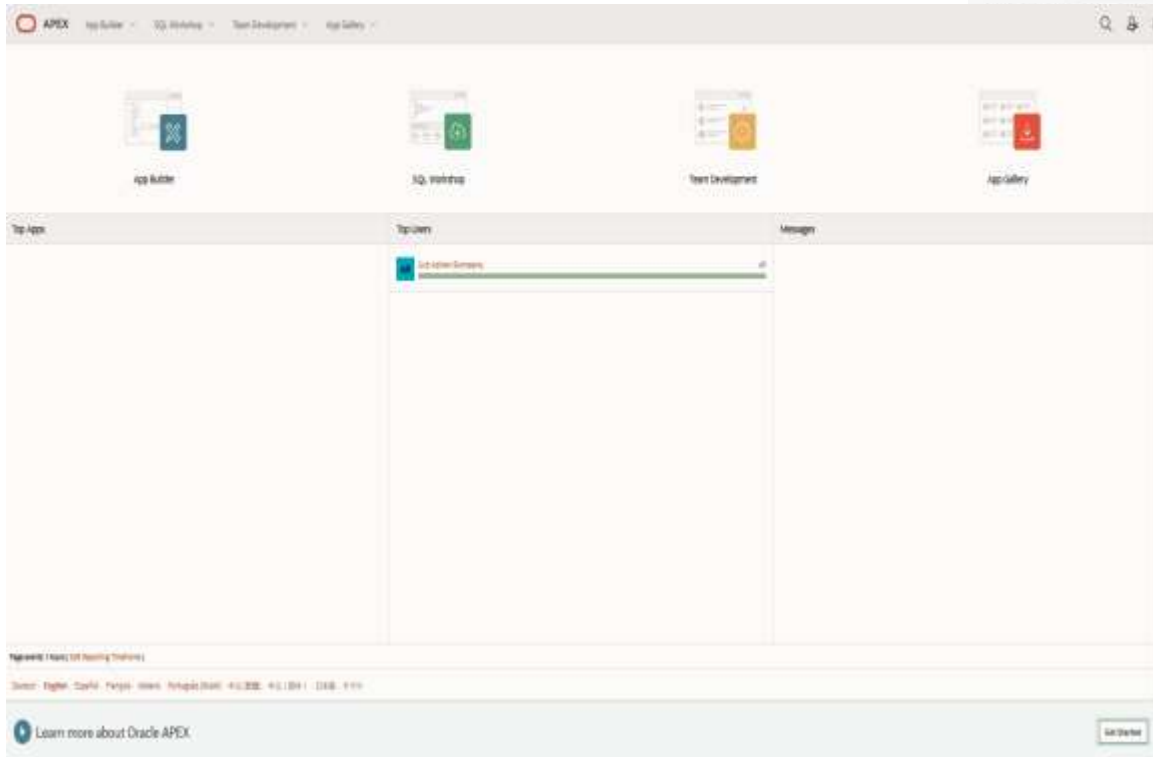


Workspace: oracle_studenti_aia
username: e-mail-ul studentului
password: Student_2026
Parola va fi schimbata la prima conectare.

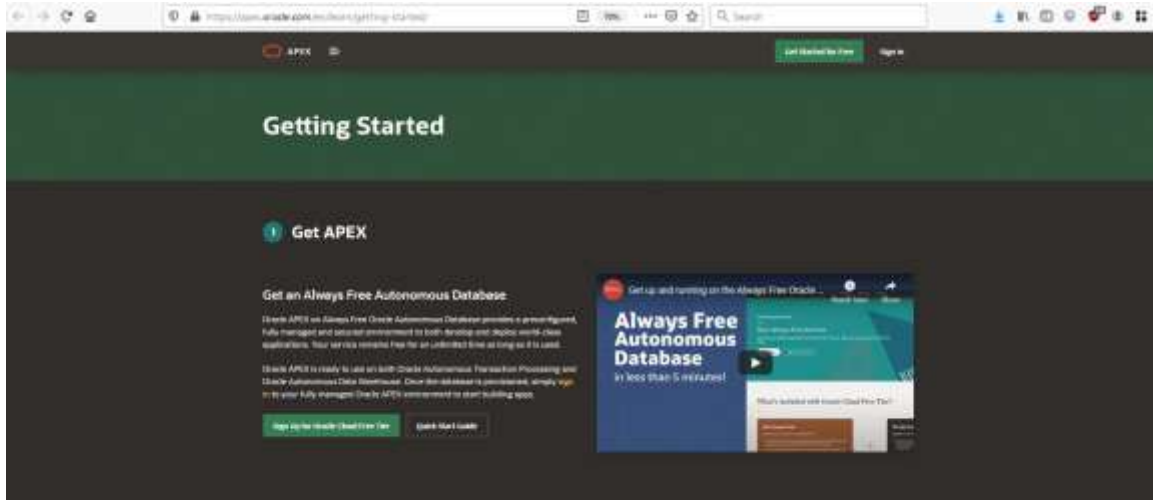
A screenshot of the Oracle Application Express sign-in interface. At the top is the Oracle Application Express logo. Below it, the text 'Oracle Application Express' is displayed. There are three input fields: the first contains 'oracle_studenti_aia' with a database icon and a green checkmark; the second contains 'email@GMAIL.COM' with a person icon and a green checkmark; the third contains a masked password '.....' with a key icon and a green checkmark. Below the fields is a checkbox labeled 'Remember workspace and username' with a question mark icon. A large green 'Sign In' button is centered below the checkbox. At the bottom, there are links for 'Reset Password' and 'Request a Workspace'. A footer bar contains language options: Deutsch, English, Español, Français, Italiano, Português (Brasil), 中文(繁體), 中文(简体), 日本語, and 한국어.

Dupa conectare, in fereastra principal sunt elementele necesare proiectarii si implementarii unor aplicatii web cu baze de date:

Baze de date - SQL



In zona **Get Started** putem accesa informatiile despre utilizarea Oracle APEX:

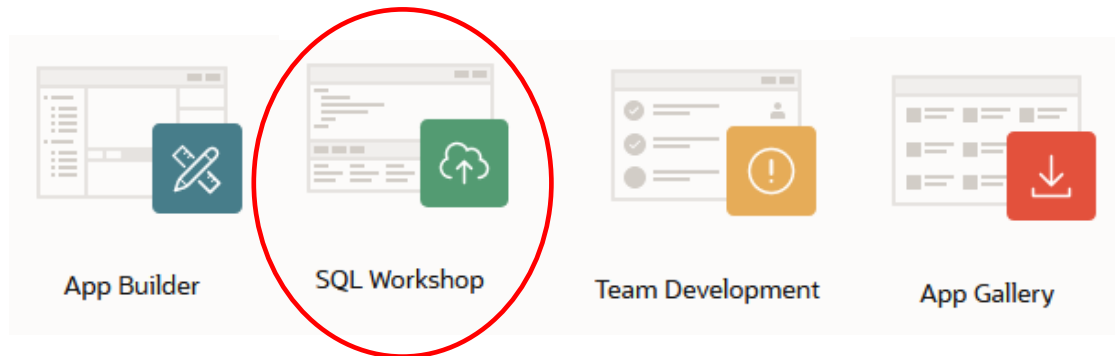
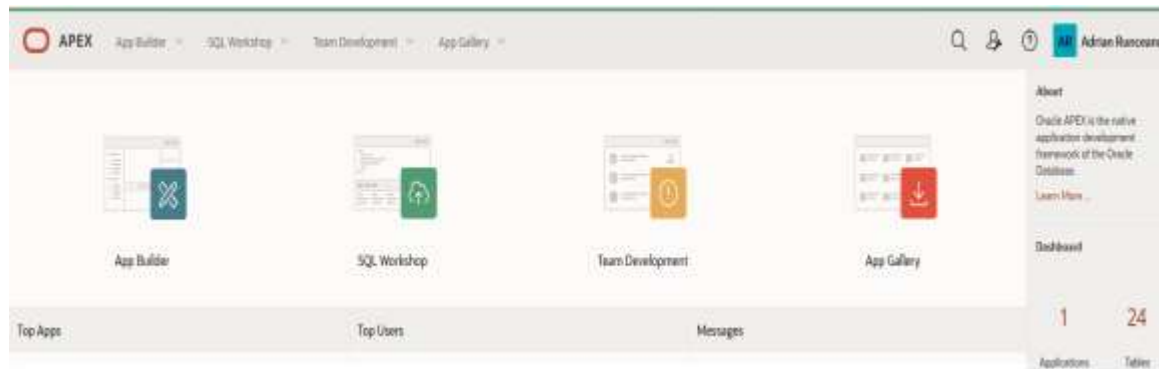


Baze de date - SQL



Zona principala a ferestrei este compusa din optiunile:

App Builder SQL Workshop Team Development App Gallery



Recomand accesarea link-ului ORACLE:

<https://docs.oracle.com/en/database/oracle/application-express/20.2//htmdb/understanding-the-workspace-home-page.html#GUID-7D85282E-E919-434F-A78B-9390E076751A>

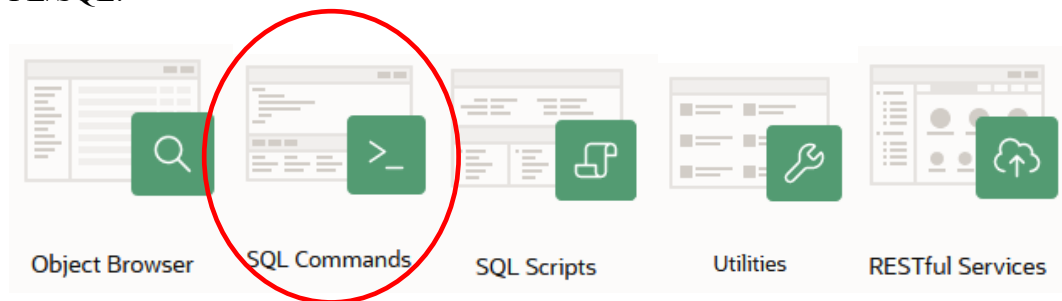
2) Schema implicita de lucru in SQL Workshop

Prin selectarea optiunii **SQL Workshop** vom obtine acces la zona de lucru SQL si de gestionare a tabelor existente in schema implicita. In plus se vor crea alte obiecte ale bazei de date: tabele, indcesi, view-uri, trigger, etc:

Baze de date - SQL



In zona **Object Browser** avem toate obiectele cu care putea lucra intr-o baza de date, iar in zona **SQL Commands** accesam zona de introducere si executie de comenzi SQL si PL/SQL.



Vom exemplifica comenzile SQL folosind cateva tabele predefinite:

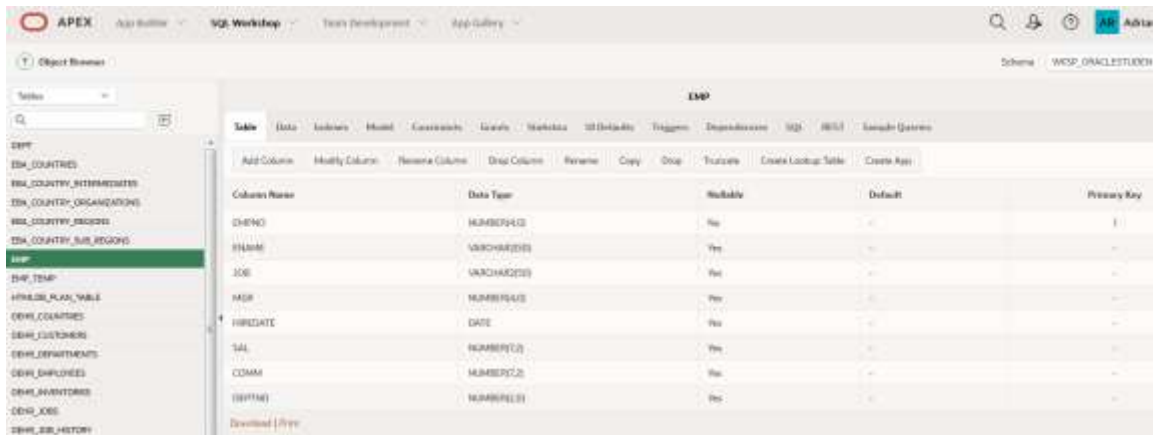
- 1) **Tabela EMP** - care gestioneaza datele despre angajatii unei firme
- 2) **Tabela DEPT** - gestioneaza informatii despre departamentele dintr-o firma

Baze de date - SQL



1) Tabela EMP

Tabela **EMP** - Structura tabelii **EMP** se poate observa accesand zona din stanga ferestrei de lucru si link pe denumirea **EMP**. In zona principala vor aparea 13 suboptiuni, incepand cu **Table**, unde de prezinta structura oricarei table selectate anterior din meniul din stanga.



	A	B	C	D	E	F	G	H
1	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
2	7839	KING	PRESIDENT		11/17/1981	5000		10
3	7698	BLAKE	MANAGER	7839	5/1/1981	2850		30
4	7782	CLARK	MANAGER	7839	6/9/1981	2450		10
5	7566	JONES	MANAGER	7839	4/2/1981	2975		20
6	7788	SCOTT	ANALYST	7566	12/9/1982	3000		20
7	7902	SMITH	ANALYST	7566	12/3/1981	3000		20
8	7369	SMITH	CLERK	7902	12/17/1980	800		20
9	7499	ALLEN	SALESMAN	7698	2/20/1981	1600	300	30
10	7521	WARD	SALESMAN	7698	2/22/1981	1250	500	30
11	7654	SMITH	SALESMAN	7698	9/28/1981	1250	1400	30
12	7844	TURNER	SALESMAN	7698	9/8/1981	1500	0	30
13	7876	ADAMS	CLERK	7788	1/12/1983	1100		20
14	7900	JAMES	CLERK	7698	12/3/1981	950		30
15	7934	MILLER	CLERK	7782	1/23/1982	1300		10

Baze de date - SQL



Din suboptiunea Data, obtinem informatiile deja existente in tabela **EMP**:

The screenshot shows the Oracle APEX SQL Workshop interface. The 'EMP' table is selected, and the 'Data' tab is active. The table contains the following data:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	01/11/1981	5000	-	10
7566	BLAKE	MANAGER	7839	05/03/1981	2800	-	10
7512	CLARK	MANAGER	7839	06/09/1981	2400	-	10
7569	SCOTT	MANAGER	7839	08/12/1981	2900	-	10
7568	JONES	ANALYST	7566	02/01/1981	3000	-	10
7643	SMITH	ANALYST	7566	02/03/1981	3000	-	10
7694	SMITH	CLERK	7643	02/03/1981	800	-	10
7691	ALLEN	SALESMAN	7694	02/20/1981	1600	300	30
7371	WARD	SALESMAN	7694	02/22/1981	1200	500	30
7524	SMITH	SALESMAN	7691	04/23/1981	1200	1400	30
7644	TURNER	SALESMAN	7691	08/13/1981	1500	0	30
7781	ADAMS	CLERK	7788	12/13/1981	1100	-	30

	A	B	C	D	E
1	Column Name	Data Type	Nullable	Default	Primary Key
2	EMPNO	NUMBER(4,0)	No		1
3	ENAME	VARCHAR2(50)	Yes		
4	JOB	VARCHAR2(50)	Yes		
5	MGR	NUMBER(4,0)	Yes		
6	HIREDATE	DATE	Yes		
7	SAL	NUMBER(7,2)	Yes		
8	COMM	NUMBER(7,2)	Yes		
9	DEPTNO	NUMBER(2,0)	Yes		

2) Tabela DEPT

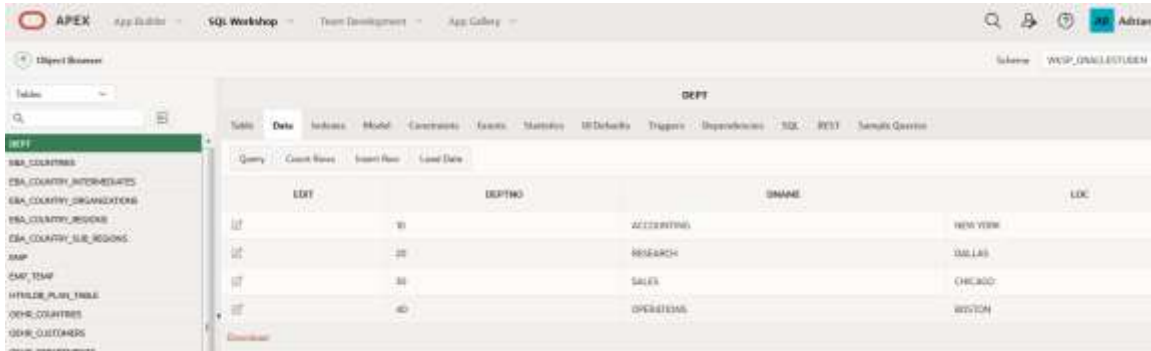
The screenshot shows the Oracle APEX SQL Workshop interface. The 'DEPT' table is selected, and the 'Table' tab is active. The table structure is as follows:

Column Name	Data Type	Nullable	Default	Primary Key
DEPTNO	NUMBER(2,0)	No	-	1
DNAME	VARCHAR2(30)	Yes	-	-
LOC	VARCHAR2(30)	Yes	-	-

Baze de date - SQL



	A	B	C
1	DEPTNO	DNAME	LOC
2	10	ACCOUNTING	NEW YORK
3	20	RESEARCH	DALLAS
4	30	SALES	CHICAGO
5	40	OPERATIONS	BOSTON



	A	B	C	D	E
1	Column Name	Data Type	Nullable	Default	Primary Key
2	DEPTNO	NUMBER(2,0)	No		1
3	DNAME	VARCHAR2(50)	Yes		
4	LOC	VARCHAR2(50)	Yes		

Documentatie ORACLE APEX:

<https://docs.oracle.com/en/database/oracle/application-express/20.2//htmldb/understanding-the-workspace-home-page.html#GUID-7D85282E-E919-434F-A78B-9390E076751A>