



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/>

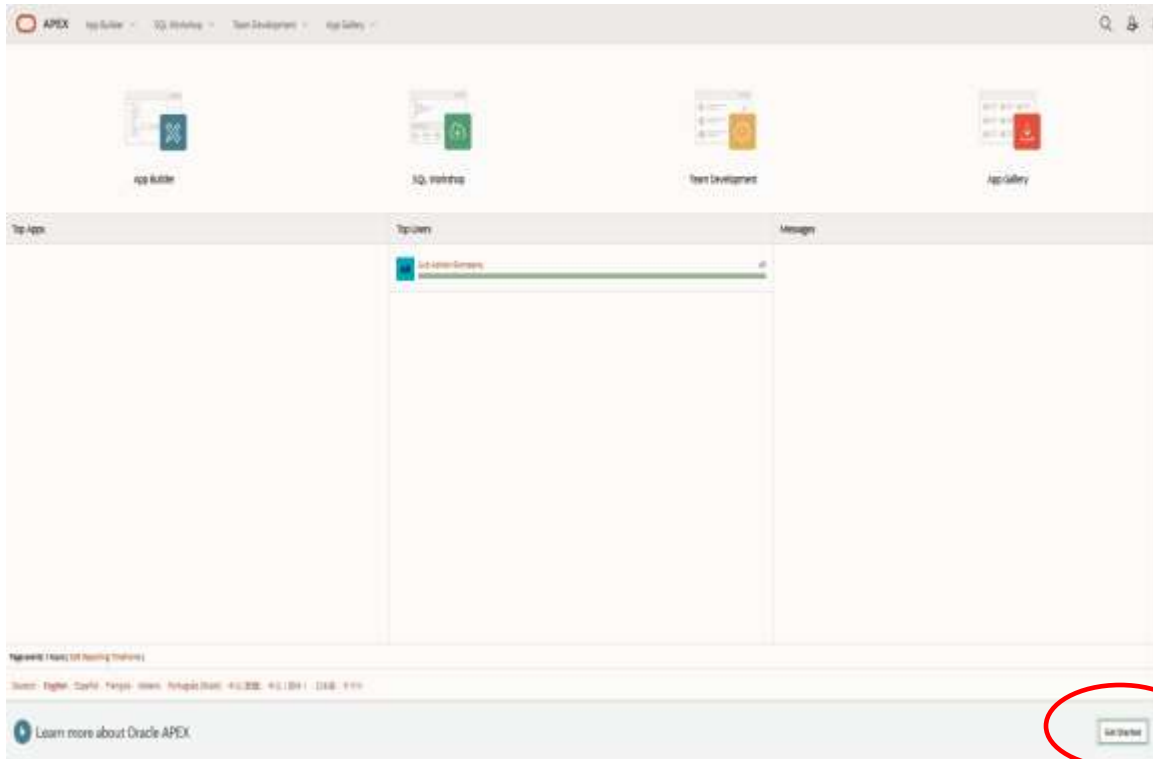
Workspace: oracle_studenti_aia
username: e-mail-ul studentului
password: Student_2023
Parola va fi schimbata la prima conectare.

A screenshot of the Oracle Application Express login page. At the top is the Oracle Application Express logo. Below it is the title 'Oracle Application Express'. 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 these is a checkbox labeled 'Remember workspace and username' with a question mark icon. A large green 'Sign In' button is at the bottom. Below the button are links for 'Reset Password' and 'Request a Workspace'. At the very bottom, there is a list of languages: Deutsch, English, Español, Français, Italiano, Português (Brasil), 中文 (繁體), 中文 (简体), 日本語, and 한국어.

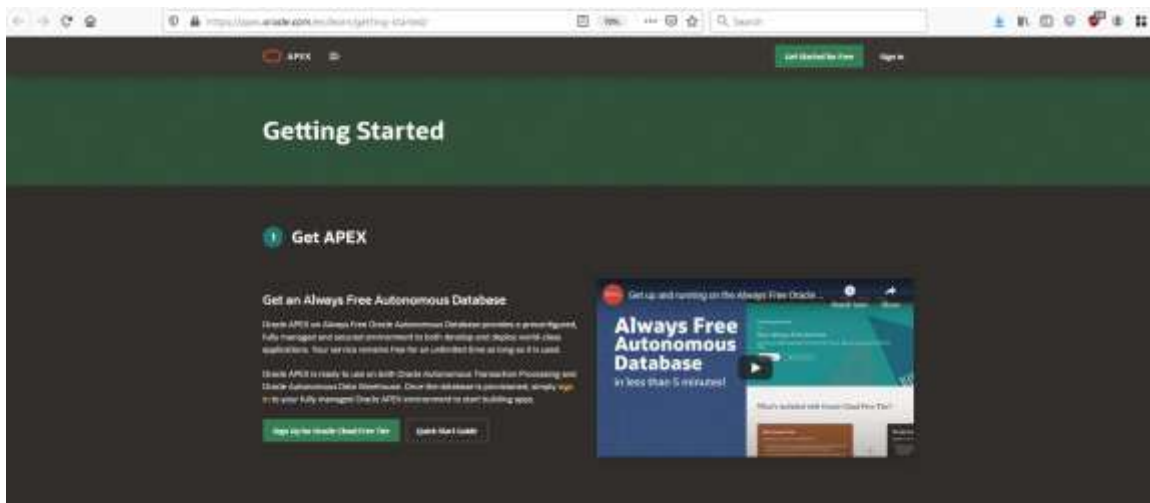
Baze de date - SQL (2023)



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



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

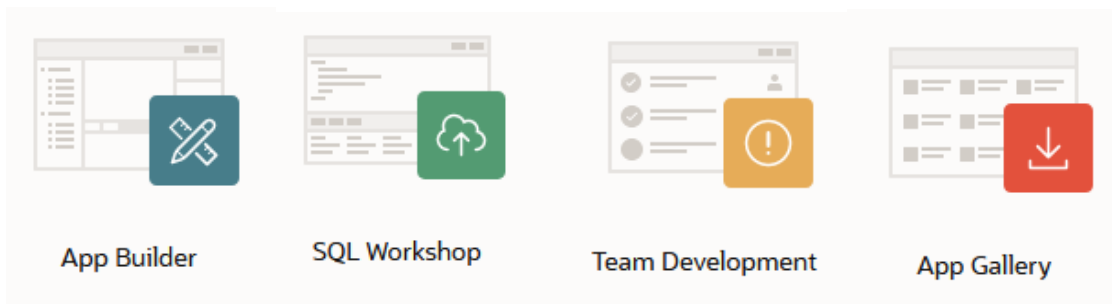
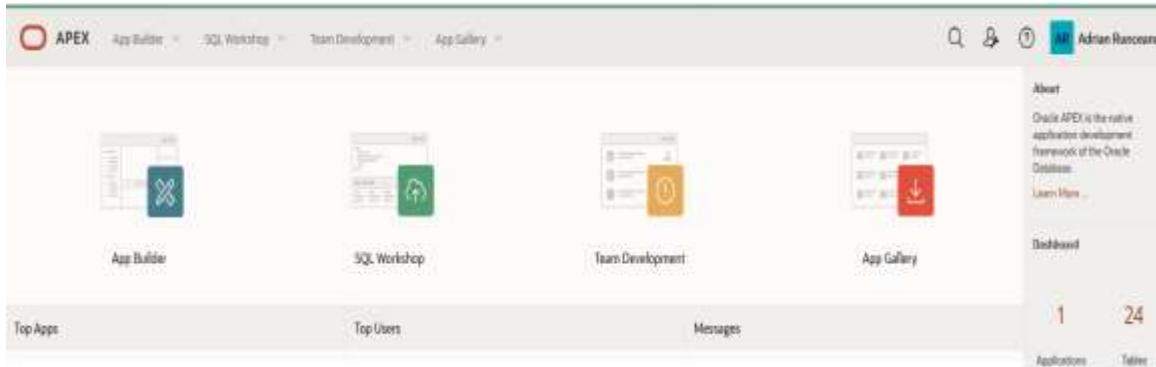


Baze de date - SQL (2023)



Zona principala a ferestrei este compusa din optiunile:

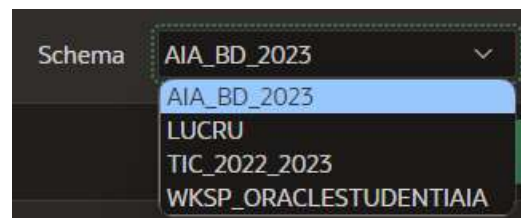
App Builder SQL Workshop Team Development App Gallery



Recomand accesarea link-ului ORACLE:

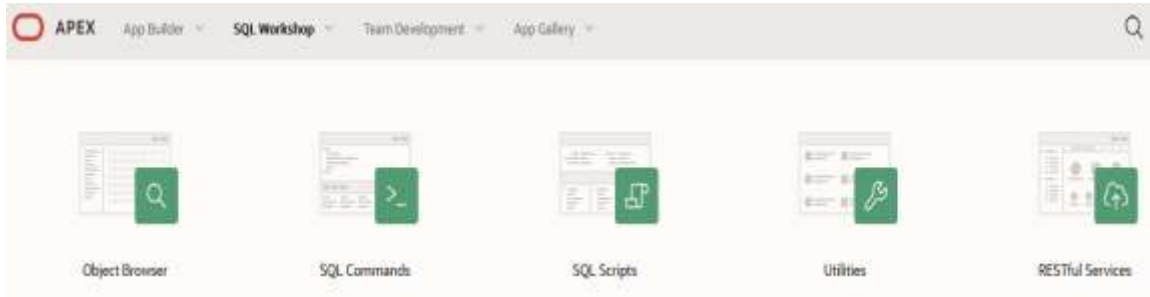
<https://docs.oracle.com/en/database/oracle/application-express/20.2/htmdb/understanding-the-workspace-home-page.html#GUID-7D85282E-E919-434F-A78B-9390E076751A>

2) Schema implicita de lucru in SQL Workshop

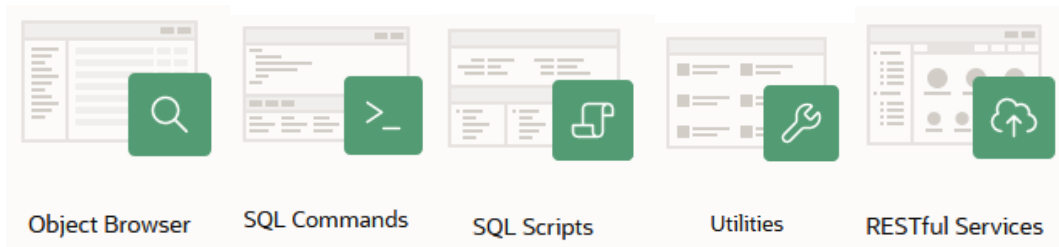


Prin selectarea optiunii **SQL Workshop** vom obtine acces la zona de lucru SQL si de gestionare a tabelor existente in schema implicita. In plus se vor crea alte obiecte ale bazei de date: tabele, indcesi, view-uri, trigger, etc:

Baze de date - SQL (2023)



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:

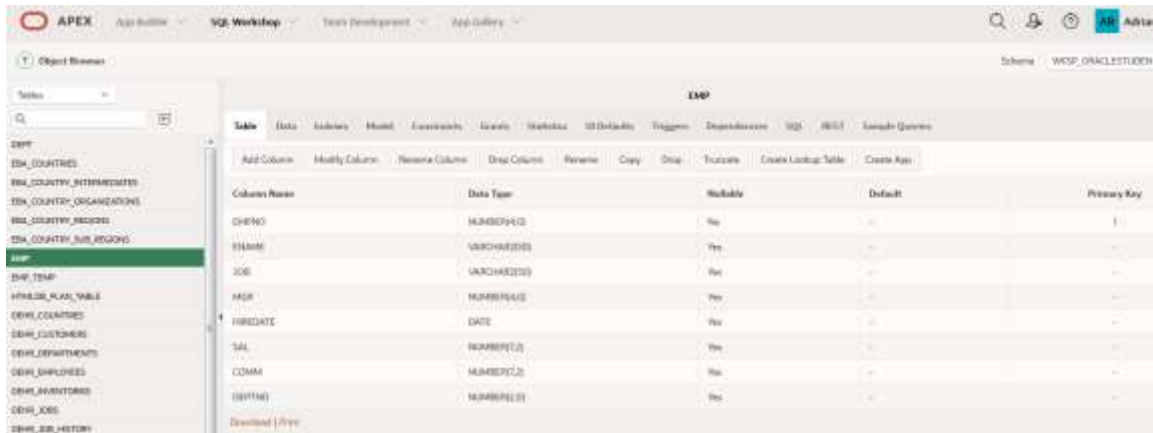
- 1) **Tabela EMP** - care gestioneaza datele despre angajatii unei firme
- 2) **Tabela DEPT** - gestioneaza informatii despre departamentele dintr-o firma



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 principal vor aparea 13 suboptiuni,incepand cu **Table**, unde de prezinta structura oricarei tabel 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

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

Baze de date - SQL (2023)



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Object Browser

Table: EMP

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESCOT	-	01/11/1981	5000	-	10
7840	BLAKE	MANAGER	7839	05/01/1981	2800	-	10
7841	CLARK	MANAGER	7839	06/07/1981	2400	-	10
7842	SMITH	MANAGER	7839	09/02/1981	1700	-	10
7843	SCOTT	ANALYST	7839	07/07/1981	3000	-	10
7844	JAMES	ANALYST	7839	03/08/1981	3000	-	10
7845	MARTIN	CLERK	7839	01/05/1981	800	-	10
7846	ALLEN	SALESMAN	7839	02/02/1981	1600	300	30
7847	WARD	SALESMAN	7839	02/02/1981	1200	500	30
7848	MARTIN	SALESMAN	7839	04/02/1981	1200	1400	30
7849	TURNEY	SALESMAN	7839	08/08/1981	1700	0	30
7850	ADAMS	CLERK	7839	12/17/1981	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

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Object Browser

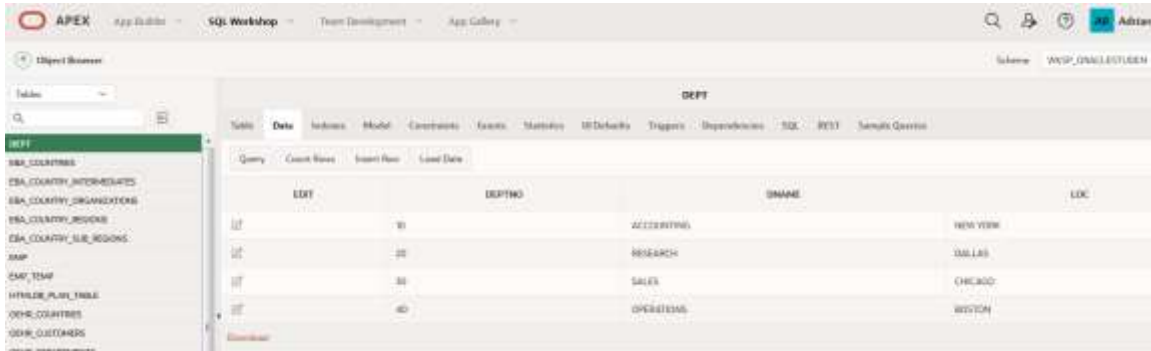
Table: DEPT

Column Name	Data Type	Nullable	Default	Primary Key
DEPTNO	NUMBER(2,0)	No	-	1
ENAME	VARCHAR2(50)	Yes	-	-
LOC	VARCHAR2(30)	No	-	-

Baze de date - SQL (2023)



	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>