



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_2022

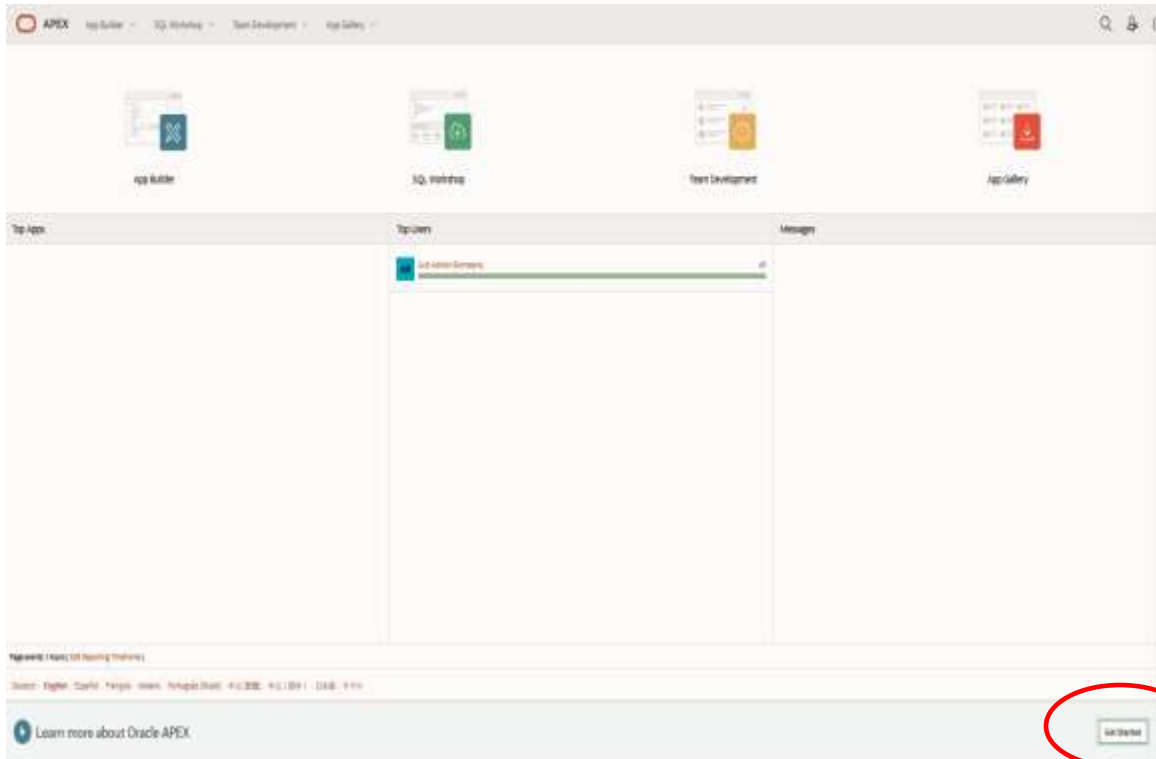
Parola va fi schimbata la prima conectare.

A screenshot of the Oracle Application Express login page. At the top center is the Oracle Application Express logo (two crossed pencils). Below the logo 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 fields is a checkbox labeled 'Remember workspace and username' with a question mark icon, which is checked. A large green 'Sign In' button is positioned below the checkbox. At the bottom of the form, there 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.

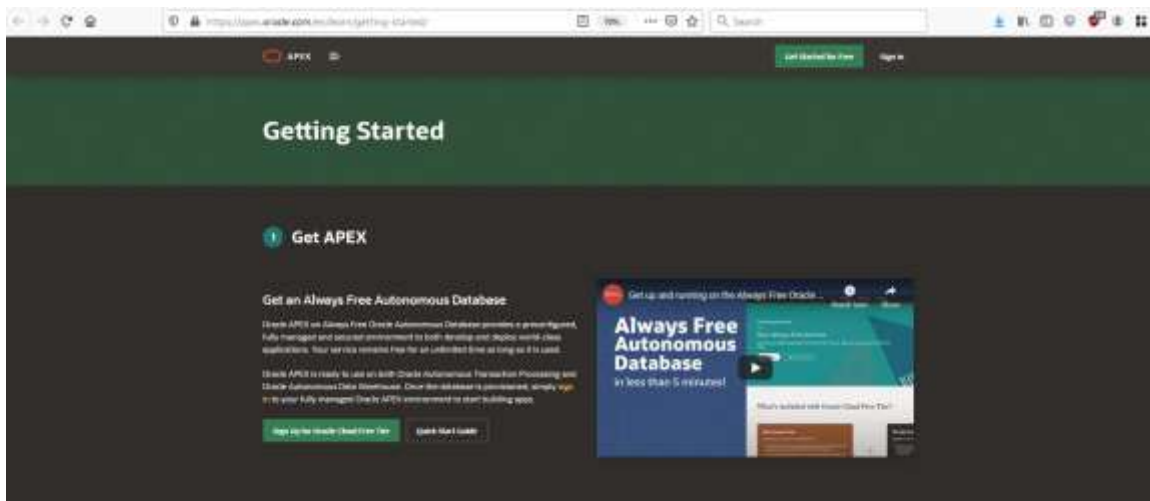
Baze de date - SQL (2022)



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:

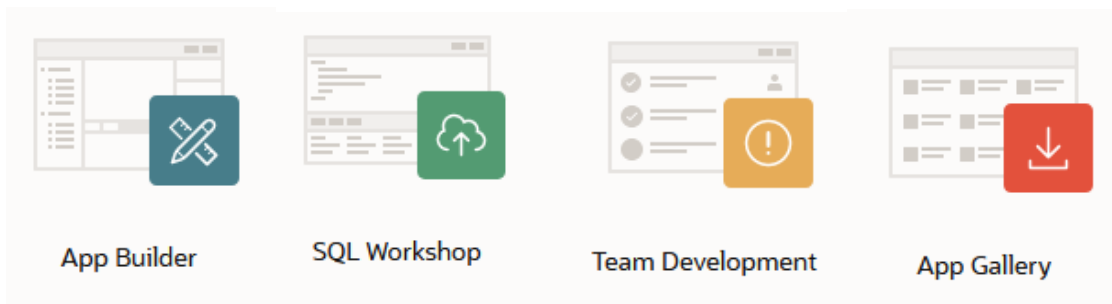
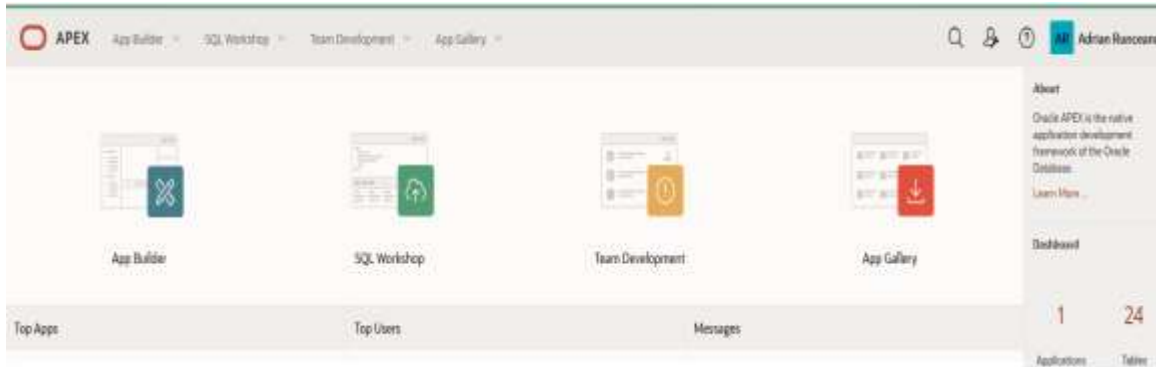


Baze de date - SQL (2022)



Zona principala a ferestrei este compusa din optiunile:

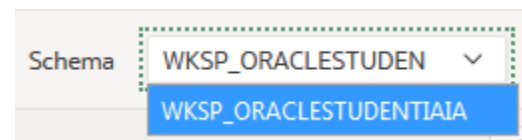
App Builder SQL Workshop Team Development App Gallery



Recomand accesarea link-ului ORACLE:

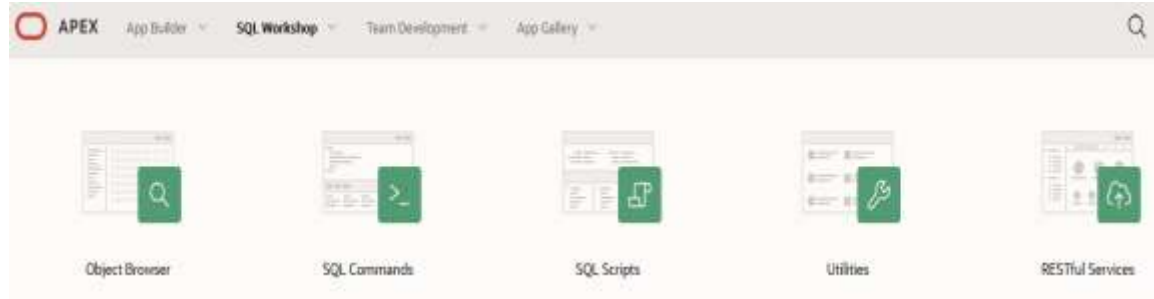
<https://docs.oracle.com/en/database/oracle/application-express/20.2/htmdb/understanding-the-workspace-home-page.html#GUID-7D85282E-E919-434F-A78B-9390E076751A>

2) Schema implicita de lucru in SQL Workshop

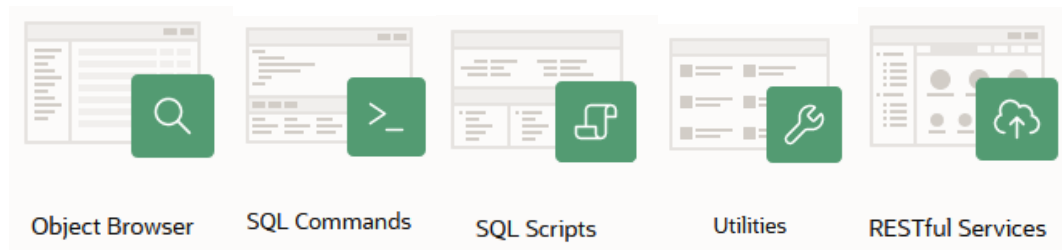


Prin selectarea optiunii **SQL Workshop** vom obtine acces la zona de lucru SQL si de gestionare a tabelor existente in schema implicita. In plus se vor crea alte obiecte ale bazei de date: tabele, indcesi, view-uri, triggerre, etc:

Baze de date - SQL (2022)



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:

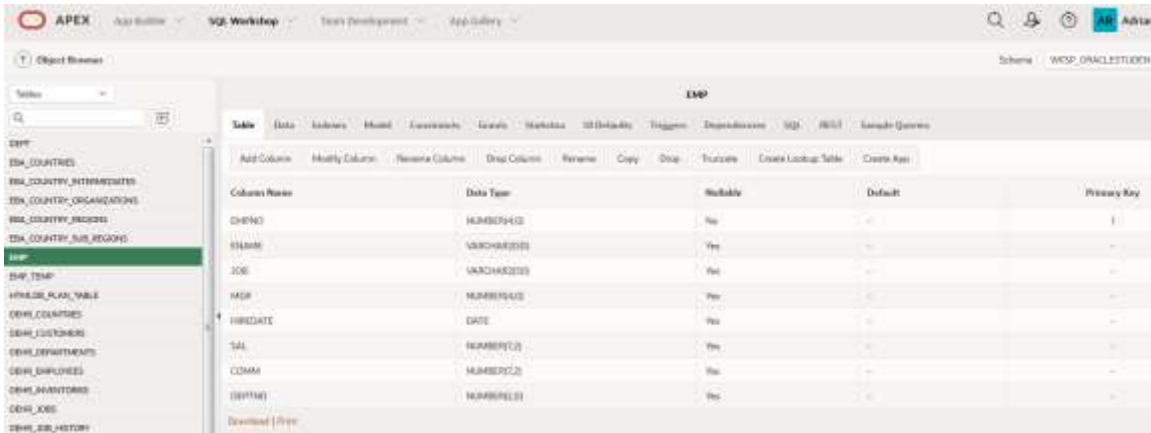
- 1) **Tabela EMP** - care gestioneaza datele despre angajatii unei firme
- 2) **Tabela DEPT** - gestioneaza informatii despre departamentele dintr-o firma



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 (2022)



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Object Browser

Table: EMP

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESDENT	-	01/11/1981	5000	-	10
7840	BLAKE	MANAGER	7839	05/01/1981	2800	-	10
7841	CLARK	MANAGER	7839	09/08/1981	2400	-	10
7842	SMITH	MANAGER	7839	09/12/1981	1700	-	10
7843	SCOTT	ANALYST	7839	07/07/1982	3000	-	20
7844	JAMES	ANALYST	7839	03/08/1981	3000	-	20
7845	MARTIN	CLERK	7839	01/05/1981	800	-	20
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	1100	0	30
7850	ADAMS	CLERK	7839	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

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Object Browser

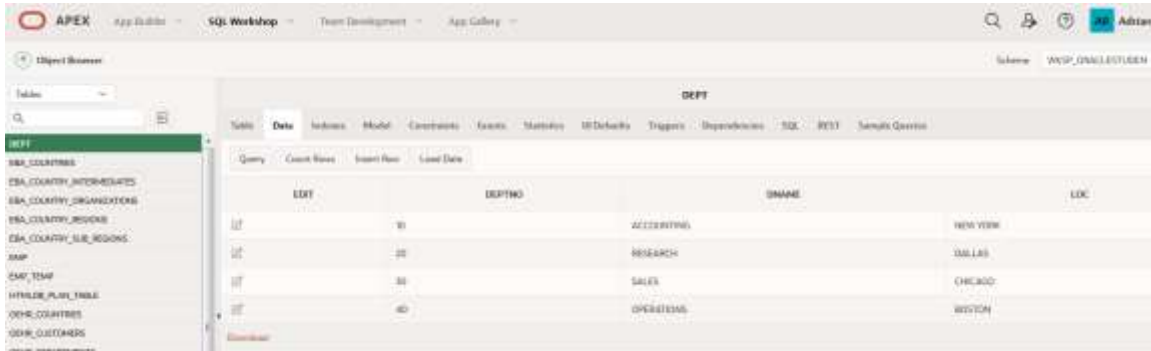
Table: DEPT

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 (2022)



	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/htmdb/understanding-the-workspace-home-page.html#GUID-7D85282E-E919-434F-A78B-9390E076751A>