

# DB PRAKTIKUM APEX

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D4 TI 2B

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# 1 Tutorial Apex

## 1.1 Apa yang dimaksud dengan Oracle Application Express (APEX)?

Oracle Application Express (APEX) adalah platform pengembangan *low-code* yang memungkinkan Anda membangun aplikasi perusahaan yang dapat diskalakan dan aman, dengan fitur kelas dunia, yang dapat digunakan di mana saja.

## 1.2 Pembuatan Akun

Untuk membuat akun anda dapat mengikuti langkah-langkah berikut;

- Buka link <https://apex.oracle.com/en/>

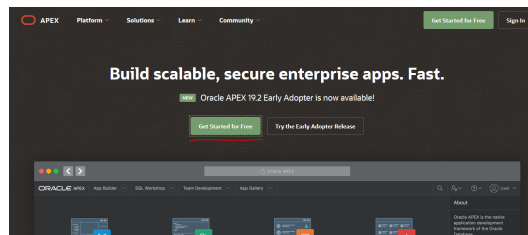


Figure 1: Gambar 1.0

- Kemudian klik tombol *Get Started for Free*
- Pilih *Request a Free Workspace*

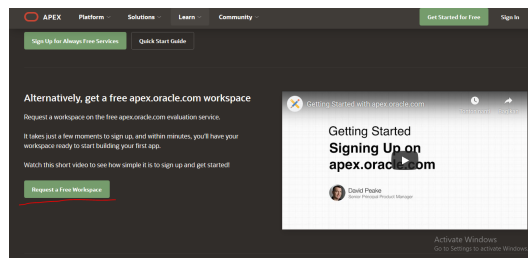


Figure 2: Gambar 1.1

- Isi untuk memenuhi persyaratan

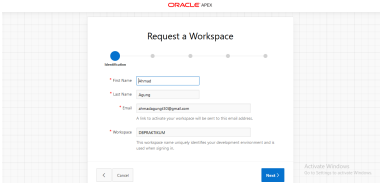


Figure 3: Gambar 1.2

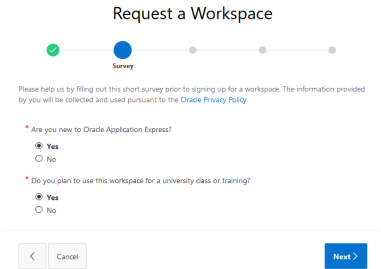


Figure 4: Gambar 1.3

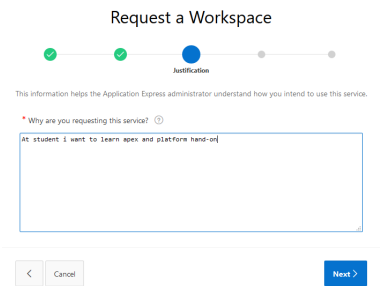


Figure 5: Gambar 1.4

Request a Workspace

ORACLE APPLICATION EXPRESS SERVICE AGREEMENT

PLEASE SCROLL DOWN AND READ ALL OF THE FOLLOWING TERMS OF USE CAREFULLY. THIS IS A LEGAL AGREEMENT ("AGREEMENT") BETWEEN YOU AND ORACLE AMERICA, INC., STATING THE TERMS AND CONDITIONS THAT GOVERN YOUR USE OF THE ORACLE APPLICATION EXPRESS SERVICE. IF YOU ARE ENTERING INTO THIS AGREEMENT ON BEHALF OF A COMPANY OR LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE TERMS AND CONDITIONS. IN WHICH CASE THE TERMS "YOU" AND "YOUR" SHALL REFER TO SUCH ENTITY. BY CLICKING "I ACCEPT" OR BY USING THE ORACLE APPLICATION EXPRESS SERVICE, YOU ARE AGREEING TO ALL OF THE TERMS AND CONDITIONS, INCLUDING, WITHOUT LIMITATION, THE FOLLOWING:

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< Cancel Next >

Figure 6: Gambar 1.5

Request a Workspace

Confirmation

Workspace Name DBPRAKTIKUM

First Name Ahmad

Last Name Agung

Administrator Email ahmadagung30@gmail.com

< Cancel Submit Request

Figure 7: Gambar 1.6

## 1.3 Membuat App Pada APEX

- Masuk ke menu *login* APEX

Oracle Application Express

DBPRAKTIKUM

ahmadagung30@gmail.com

Remember workspace and username ⓘ

Sign In

Reset Password Request a Workspace

Deutsch English Español Français Italiano Português (Brasil) 中文 (繁體) 中文 (简体) 日本語 한국어

Figure 8: Gambar 2.0

- Pilih *App Builder*

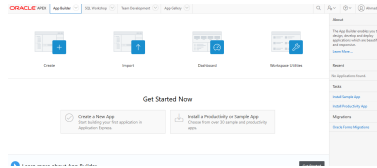


Figure 9: Gambar 2.1

- Kemudian pilih *Create a New App*

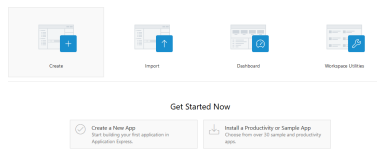


Figure 10: Gambar 2.2

- Pastikan anda memiliki data berbentuk CSV, pilih *From a File*

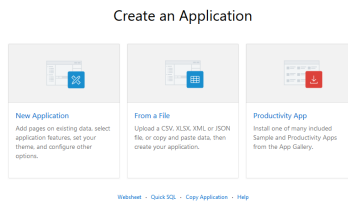


Figure 11: Gambar 2.3

- Pilih file CSV

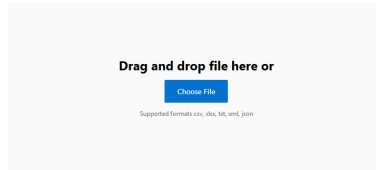


Figure 12: Gambar 2.4

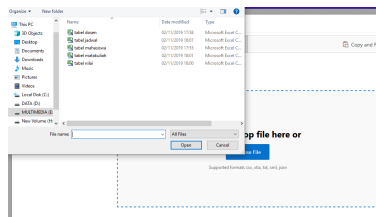


Figure 13: Gambar 2.5

- Tambahkan nama tablenya, kemudian *load data*

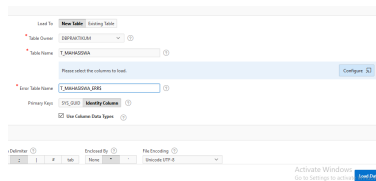


Figure 14: Gambar 2.6

- Jika selesai load data, jangan langsung dibuat aplikasinya karena kita akan menambahkan tabel lagi. Klik tanda silang pada ujung kanan atas.

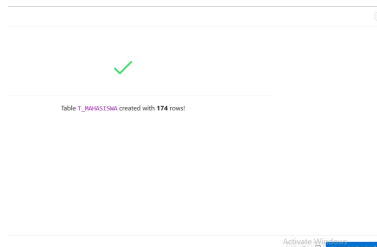


Figure 15: Gambar 2.7

- Kemudian masuk ke *SQL Command*

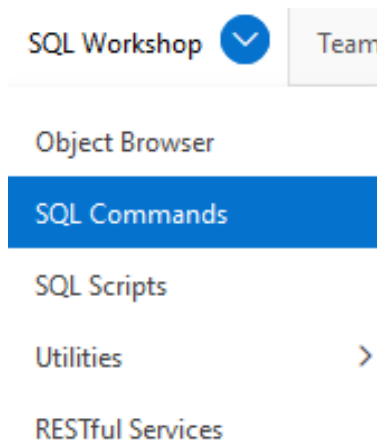
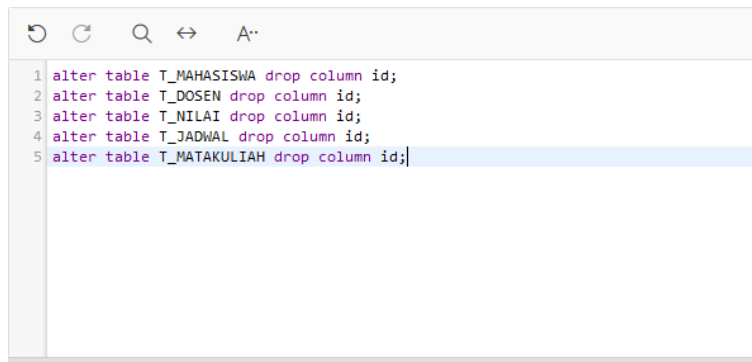


Figure 16: Gambar 2.8

- Kita akan menghapus *id* dari setiap tabelnya dengan menambahkan *script* seperti pada gambar dibawah ini. Namun kita harus *ran* satu persatu di setiap tabel columny id yang akan dihapus, dan tidak bisa langsung sekaligus. Contohnya : alter tabel t\_mahasiswa drop column id;



```
1 alter table T_MAHASISWA drop column id;
2 alter table T_DOSEN drop column id;
3 alter table T_NILAI drop column id;
4 alter table T_JADWAL drop column id;
5 alter table T_MATAKULIAH drop column id;
```

Figure 17: Gambar 2.9

- Setelah dihapus selanjutnya kita menambahkan *primary key* pada tabel mahasiswa, dosen, dan matakuliah.



```
1 alter table T_MAHASISWA
2 add primary key (npm);
3
4 alter table T_DOSEN
5 add primary key (k_dosen);
6
7 alter table T_MATAKULIAH
8 add primary key (k_matakuliah);
```

Figure 18: Gambar 2.10



T\_MAHASISWA

Table

Data

Indexes

Model

Constraints

Grants

Statistics

UI Defaults

Triggers

Dependencies

SQL

REST

Sample Queries

Add Column

Modify Column

Rename Column

Drop Column

Rename

Copy

Drop

Truncate

Create Lookup Table

Create App

Column Name	Data Type	Nullable	Default	Primary Key
NPM	NUMBER	No	-	1
NAMA_MAHASISWA	VARCHAR2(255)	Yes	-	-
ALAMAT	VARCHAR2(255)	Yes	-	-
TANGGAL_LAHIR	VARCHAR2(50)	Yes	-	-

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Figure 19: Gambar 2.11 NPM jadi *Primary Key* pada tabel Mahasiswa

T_DOSEN											+/-	
Table	Data	Indexes	Model	Constraints	Grants	Statistics	UI Defaults	Triggers	Dependencies	SQL	REST	Sample Queries
Add Column		Modify Column		Rename Column		Drop Column	Rename	Copy	Drop	Truncate	Create Lookup Table	Create App
Column Name				Data Type		Nullable	Default			Primary Key		
KODE_DOSEN				VARCHAR2(50)		No	-			1		
NAMA_DOSEN				VARCHAR2(50)		Yes	-			-		
ALAMAT_DOSEN				VARCHAR2(255)		Yes	-			-		
Download   Print												

Figure 20: Gambar 2.12 Kode Dosen jadi *Primary Key* pada tabel Dosen

T\_MATAKULIAH

Table

Data

Indexes

Model

Constraints

Grants

Statistics

UI Defaults

Triggers

Dependencies

SQL

REST

Sample Queries

Add Column

Modify Column

Rename Column

Drop Column

Rename

Copy

Drop

Truncate

Create Lookup Table

Create App

Column Name	Data Type	Nullable	Default	Primary Key
KODE_MATAKULIAH	VARCHAR2(50)	No	-	1
NAMA_MATAKULIAH	VARCHAR2(50)	Yes	-	-
SKS	NUMBER	Yes	-	-
SEMESTER	NUMBER	Yes	-	-
COLUMN_1	VARCHAR2(4000)	Yes	-	-
COLUMN_2	VARCHAR2(4000)	Yes	-	-

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Figure 21: Gambar 2.13 Kode matakuliah jadi *Primary Key* pada tabel Matakuliah

- Kemudian jika telah selesai menambahkan table mahasiswa, dosen, matakuliah, jadwal, dan nilai selanjutnya membuat aplikasinya.

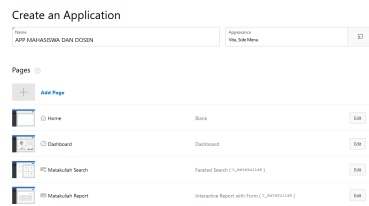


Figure 22: Gambar 2.14

- Pilih *Interactive Report*

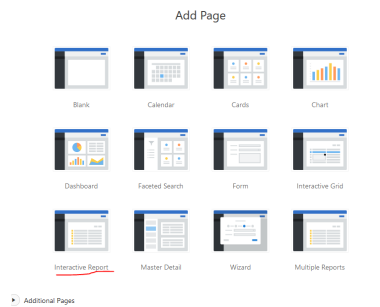


Figure 23: Gambar 2.15

- Tambahkan nama *report*, dan memilih tabel. Jika anda ingin membuat tabel lebih bagus anda dapat menambahkan icon pada table.

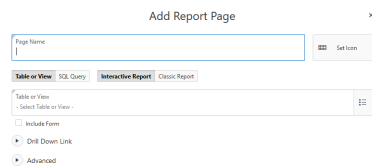


Figure 24: Gambar 2.16

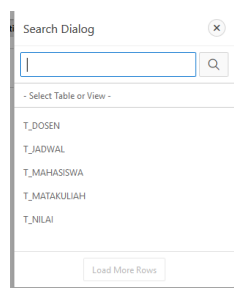


Figure 25: Gambar 2.17

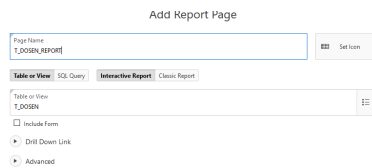


Figure 26: Gambar 2.18

- Setelah menambahkan tabel mahasiswa, dosen, dan matakuliah, selanjutnya anda membuat *report* dengan menambahkan *SQL Query*. Contohnya, menampilkan nama dosen dari kode dosen dengan memakai *inner join*

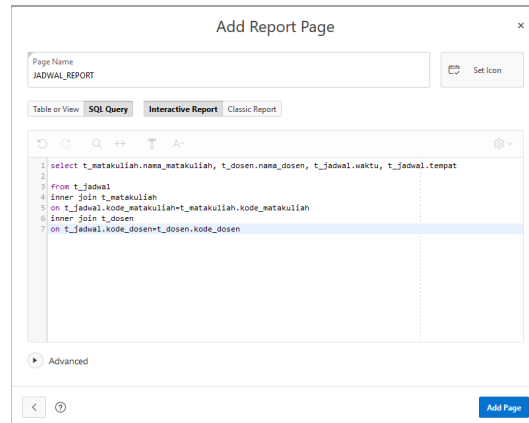


Figure 27: Gambar 2.19

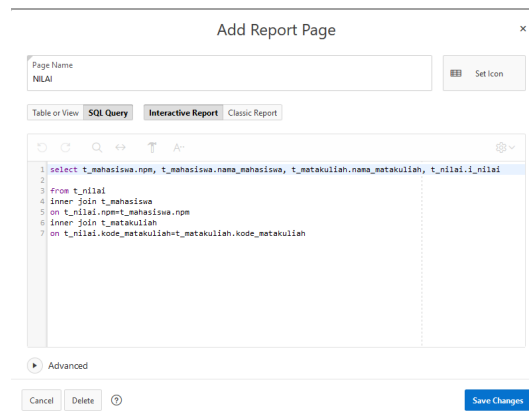
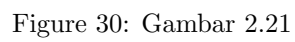


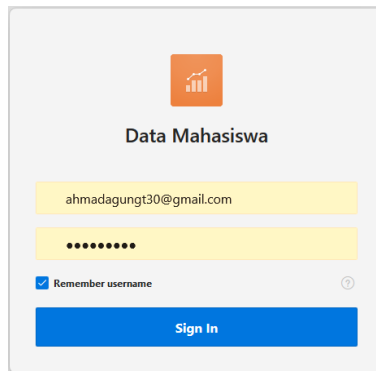
Figure 28: Gambar 2.21

- Selanjutnya anda tinggal membuat aplikasinya dengan menekan *create application*
- Tunggu hingga selesai pembuatan aplikasinya



- Figure 31: Gambar 2.22

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The login form is titled "Data Mahasiswa" and features an orange icon with a bar chart and an upward arrow. It contains two yellow input fields: the first for the email address "ahmadagunt30@gmail.com" and the second for a password represented by seven dots. Below the password field is a checkbox labeled "Remember username" with a small question mark icon to its right. At the bottom is a blue "Sign In" button.

Figure 32: Gambar 2.23

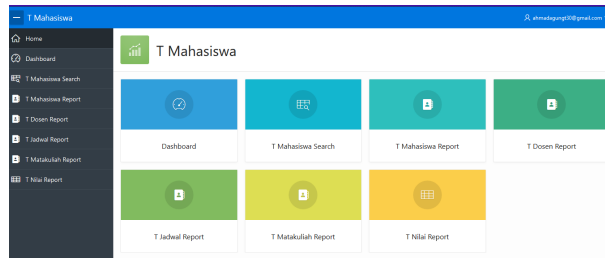


Figure 33: Gambar 2.24

## 1.4 Akun

- *Link* : [https://apex.oracle.com/pls/apex/f?p=49046:LOGIN\\_DESKTOP:15349806496009::::](https://apex.oracle.com/pls/apex/f?p=49046:LOGIN_DESKTOP:15349806496009::::)
- *User* : ahmadagunt30@gmail.com
- *Pass* : Ahmad3010