

COURSERA PROJECT

T.A. name: Dr/ Radwa Mostafa

Project documentation

Members:

| | |
|-------------|---------------------------|
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SQL code:

Table creation & data insertion:

STUDENT:

```
create Table Student  
(Stud_ID Number(20)Primary Key,  
First_name varchar2(30),  
last_name varchar2(30),  
E_mail varchar2(30),  
Stu_password Number(20));  
  
insert into student(stud_id, first_name, last_name, e_mail, stu_password)  
values (1, 'Bsmala', 'Tarek', 'bsmalaelbagoury@gmail',10022005);  
  
insert into student (stud_id, first_name, last_name, e_mail, stu_password)  
values (2, 'Tassnem', 'mohamed', 'tassnemmohamed@gmail', 17032005);  
  
insert into student(stud_id, first_name, last_name, e_mail, stu_password)  
values (3, 'Toka', 'karam', 'tokakaram@gmail',02022005);  
  
insert into student (stud_id, first_name, last_name, e_mail, stu_password)  
values (4, 'Youssef', 'Tarek', 'youseeftarek@gmail',13122002);  
  
insert into student(stud_id, first_name, last_name, e_mail, stu_password)  
values (5, 'Ahmed', 'khilil', 'ahmedkhilil@gmail',95421306);  
  
insert into student(stud_id, first_name, last_name, e_mail, stu_password)  
values (6, 'Ahmed', 'Reda', 'ahmedrede@gmail',10543289);  
  
insert into student(stud_id, first_name, last_name, e_mail, stu_password)  
values (7, 'omar', 'Elhady', 'omarelhady@gmail',27134508);
```

```
insert into student(stud_id, first_name, last_name, e_mail, stu_password)
values (8, 'Ammar', 'mohammed', 'ammarmohamed@gmail',31907634);
insert into student (stud_id, first_name, last_name, e_mail, stu_password)
values (9, 'omnia', 'mohamed', 'omniamohamed@gmail',20209873);
insert into student (stud_id, first_name, last_name, e_mail, stu_password)
values (10, 'yassmin', 'salah', 'yassminsalah@gamil', 20235419);
```

INSTRUCTOR:

```
create table Instructor (
Ins_id number PRIMARY KEY,
First_Name VARCHAR2(10) ,
Last_Name VARCHAR2(10),
Specialilty VARCHAR2(100),
Description VARCHAR2(400),
Acadmic_Degree VARCHAR2(100),
Pervious_experiance VARCHAR2(300));
```

Insert into instructor

```
values(20254712,'kareem','Karam','Bioinformatics','Top_instructor','Bachelor of computure science','He received training in 57357 Hospital');
```

insert into instructor

```
values(20214790,'Ali','Ahmed','cybescurity','NOT_TOP_IINSTRUCTOR','Bachelor of computure science','He teached at the University of California');
```

insert into instructor

```
values(20214799,'Ahmed','Mohamed','AI','Top_instructor','Bachelor of computure science','He worked in google');
```

insert into instructor

values(20214780,'Toka','Ahmed','banking','NOT_TOP_INSTRUCTOR','Master of Business Administration','He teached at the University of Ontario');

insert into instructor

values(20214690,'Basmala','Hosam','Mathematics','Top_instructor','PhD in Mathematics','He teached at the University of Western');

insert into instructor

values(20214756,'Noor','Raft','Robotics','NOT_TOP_INSTRUCTOR','Bachelor of computure science','He received training in Google');

insert into instructor

values(20214710,'Yassin','Tamer','Translation','NOT_TOP_INSTRUCTOR','Ba chelor of Alsun','He teached at the University of Harvard');

insert into instructor

values(20214795,'Tasnem','Maged','Data Analysis','Top_instructor','Bachelor of computure science ','He teached at the University of California');

insert into instructor

values(20214730,'Bakr','Omar','Taranslation','NOT_TOP_INSTRUCTOR','ma ster degree in germany','He teached at the University of Heidelberg');

insert into instructor

values(20214738,'Gana','Saber','Markting' , 'Top_instructor','Content Markting','He teached at the University of Heidelberg');

OFFERS

CREATE TABLE offer (

S_date Date NOT NULL,

E_date DATE NOT NULL,

percentage Number(5,2),

offer_code VARCHAR2(255));

```
INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-01-01','YYYY-MM-DD'),TO_DATE('2023-01-30','YYYY-MM-DD'),25,'ABC_223');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-02-01','YYYY-MM-DD'),TO_DATE('2023-02-28','YYYY-MM-DD'),50,'Tas_005');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-03-01','YYYY-MM-DD'),TO_DATE('2023-03-31','YYYY-MM-DD'),25,'AC_443');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-04-01','YYYY-MM-DD'),TO_DATE('2023-04-30','YYYY-MM-DD'),99,'Wel_523');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-05-01','YYYY-MM-DD'),TO_DATE('2023-05-31','YYYY-MM-DD'),50,'hhu');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-06-01','YYYY-MM-DD'),TO_DATE('2023-06-30','YYYY-MM-DD'),25,'335_j');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-07-01','YYYY-MM-DD'),TO_DATE('2023-07-31','YYYY-MM-DD'),75,'g7h7j8');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-08-01','YYYY-MM-DD'),TO_DATE('2023-08-31','YYYY-MM-DD'),75,'MMMMMM');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-09-01','YYYY-MM-DD'),TO_DATE('2023-09-30','YYYY-MM-DD'),99,'Tdf_8');

INSERT INTO offer (START_DATE,END_DATE, percentage,discount_code)
VALUES(TO_DATE('2023-10-01','YYYY-MM-DD'),TO_DATE('2023-10-30','YYYY-MM-DD'),50,'MKX_345');
```

Department

```
CREATE TABLE Department
```

```
(
```

```
    DEP_ID NUMBER(10) PRIMARY KEY,
```

```
    namee VARCHAR2 (25),
```

```
    Num_courses NUMBER (10)
```

```
);
```

```
INSERT INTO Department VALUES (1, 'Data Science', 425);
```

```
INSERT INTO Department VALUES (2, 'Health', 471);
```

```
INSERT INTO Department VALUES (3, 'Information Technology', 145);
```

```
INSERT INTO Department VALUES (4, 'Math and Logic', 70);
```

```
INSERT INTO Department VALUES (5, 'Arts and Humanities', 338);
```

```
INSERT INTO Department VALUES (6, 'Social Sciences', 401);
```

```
INSERT INTO Department VALUES (7, 'Computer Science', 668);
```

```
INSERT INTO Department VALUES (8, 'Business', 1095);
```

```
INSERT INTO Department VALUES (9, 'Physical Science and Engineering',  
413);
```

```
INSERT INTO Department VALUES (10, 'Language Learning', 150);
```

Course

```
CREATE TABLE Course
```

```
(  
    Course_ID NUMBER(5) PRIMARY KEY,  
    Name VARCHAR(50) UNIQUE,  
    Price NUMBER(5) NOT NULL,  
    Min_Number NUMBER(3)NOT NULL,  
    Max_Number NUMBER(7)NOT NULL,  
    Discount_Code VARCHAR(15) REFERENCES offer(Discount_Code),  
    Dep_ID NUMBER(10) REFERENCES Department (dep_id),  
    Ins_ID NUMBER(8) REFERENCES Instructor (ins_id)  
);
```

```
insert into Course(course_id, name, price, min_number, max_number,  
discount_code, dep_id, ins_id)
```

```
Values(1000,'Machine Learning  
Specialization',1200,1,12000,'ABC_223',7,20214799);
```

```
insert into Course(course_id, name, price, min_number, max_number,  
discount_code, dep_id, ins_id)
```

```
Values(1001,'Introduction to Social Media  
Marketing',1000,10,2000,'Tas_005',8,20214738);
```

```
insert into Course(course_id, name, price, min_number, max_number,  
discount_code, dep_id, ins_id)
```

```
Values(1002,'First Step Korean',2000,35,1500,'AC_443',10,20214710);
```

```
insert into Course(course_id, name, price, min_number, max_number,  
discount_code, dep_id, ins_id)
```

```
Values(1003,'Foundations of  
Cybersecurity',1879,51,15000,'Wel_523',7,20214790);
```

```
insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1004,'The Global Financial Crisis',12400,3,13000,'hhu',6,20214780);

insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1005,'Matrix Algebra for
Engineers',1888,50,12200,'335_j',4,20214690);

insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1006,'Introduction to Networking and
Storage',5550,1,15500,'g7h7j8',3,20214756);

insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1007,'Data Visualization',4300,100,14000,'MMMMM',1,20214795);

insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1008,'Object Oriented Programming
Specialization',3900,20,10000,'Tdf_8',7,20254712);

insert into Course(course_id, name, price, min_number, max_number,
discount_code, dep_id, ins_id)

Values(1009,'Germany Vocabulary
Project',1600,35,17800,'MKX_345',10,20214730);
```

Inroll_in

```
create Table Inroll_in
(
Course_ID NUMBER(6) REFERENCES Course(Course_ID),
STUD_ID NUMBER(6) REFERENCES student(stud_ID),
primary key (course_id,stud_id)
payment_method VARCHAR2(20));
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1000,1,'fawry');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1001,2,'Credit Card');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1002,3,'visa');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1003,4,'paypal');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1004,5,'Discover');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1005,6,'American Express');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1006,7,'MasterCard');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1007,8,'Jco');
insert into Inroll_in(course_id, stud_id, payment_method)
VALUES(1008,9,'skrill');
insert into Inroll_in(course_id, stud_id, payment_method)
```

```
VALUES(1009,10,'venom');
```

CERTIFICATE

```
CREATE TABLE CERTIFICATE
```

```
(  
COURSE_ID NUMBER(6) REFERENCES Course(Course_ID) ,  
NAME_CERTIFICATE VARCHAR2(20) PRIMARY KEY  
);
```

```
INSERT INTO certificate(course_id, name_certificate)
```

```
values(1000,'META');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1001,'YALE');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1002,'GOOGLE');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1003,'RHYME');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1004,'UCI');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1005,'UCDAVIS');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1006,'STANFORD');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1007,'IESE');
```

```
INSERT INTO certificate(course_id, name_certificate)  
values(1008,'DUKE');
```

```
INSERT INTO certificate(course_id, name_certificate)
values(1009,'CORSERA_NETWORKING');
```

project

Create TABLE project

```
( pro_ID NUMBER(6)      PRIMARY KEY ,
course_ID NUMBER(6)   REFERENCES Course(Course_ID),
NAME_PRO VARCHAR2(40)  UNIQUE ,
START_DATE DATE      NOT NULL,
END_DATE DATE      NOT NULL);
```

INSERT INTO PROJECT

```
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (120,1000,'pro_cybersecurity',TO_DATE('2021-04-01','YYYY-MM-DD'),TO_DATE('2021-6-30','YYYY-MM-DD'));
```

INSERT INTO PROJECT

```
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (121,1001,'pro_object oriented programming ',TO_DATE('2021-07-01','YYYY-MM-DD'),TO_DATE('2021-09-30','YYYY-MM-DD'));
```

INSERT INTO PROJECT

```
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (122,1002,'pro_electronics',TO_DATE('2021-10-01','YYYY-MM-DD'),TO_DATE('2021-12-30','YYYY-MM-DD'));
```

INSERT INTO PROJECT

```
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (123,1003,'pro_structure programming ',TO_DATE('2022-01-01','YYYY-MM-DD'),TO_DATE('2022-03-30','YYYY-MM-DD'));
```

INSERT INTO PROJECT

```
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (124,1004,'pro_database',TO_DATE('2022-04-1','YYYY-MM-DD'),TO_DATE('2022-06-30','YYYY-MM-DD'));

INSERT INTO PROJECT
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (125,1005,'pro_statstical',TO_DATE('2022-07-1','YYYY-MM-DD'),TO_DATE('2022-9-30','YYYY-MM-DD'));

INSERT INTO PROJECT
(pro_id, course_id, name_pro, start_date, end_date)
VALUES (126,1006,'pro_AI',TO_DATE('2022-10-01','YYYY-MM-DD'),TO_DATE('2022-12-30','YYYY-MM-DD'));

INSERT INTO PROJECT
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (127,1007,'pro_graphic',TO_DATE('2023-01-01','YYYY-MM-DD'),TO_DATE('2023-03-30','YYYY-MM-DD'));

INSERT INTO PROJECT
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (128,1008,'pro_machine learning',TO_DATE('2023-04-01','YYYY-MM-DD'),TO_DATE('2023-6-30','YYYY-MM-DD'));

INSERT INTO PROJECT
(PRO_ID, COURSE_ID, NAME_PRO,START_DATE, END_DATE)
VALUES (129,1009,'pr_Data structure',TO_DATE('2023-07-01','YYYY-MM-DD'),TO_DATE('2023-9-30','YYYY-MM-DD'));
```

Designs and interfaces:

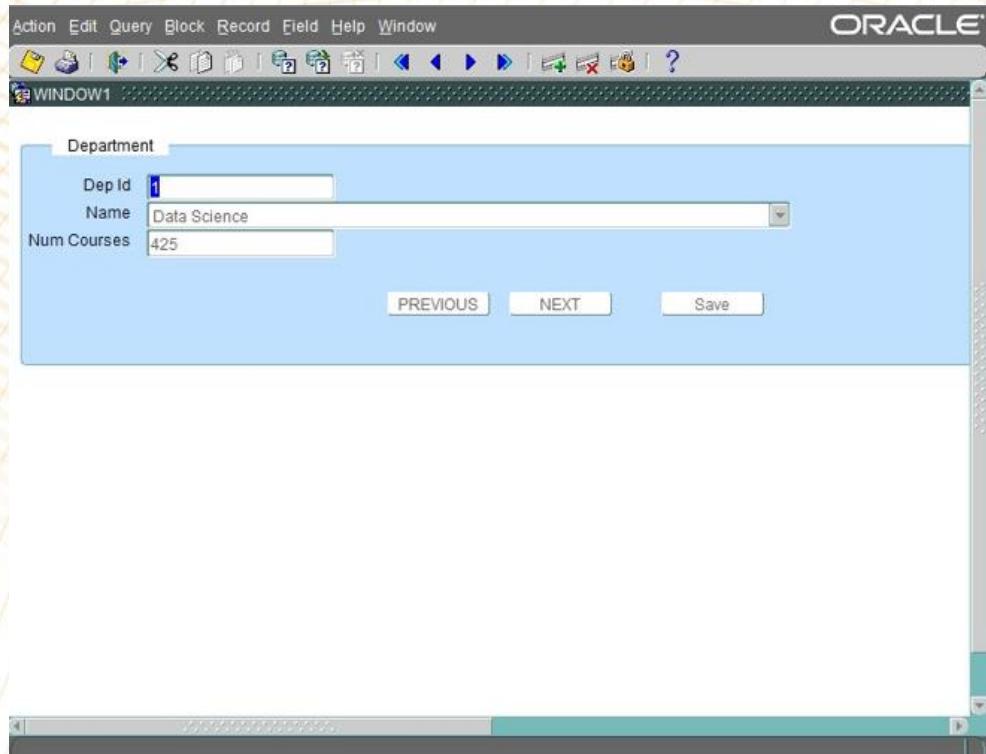


Figure 1 department interface

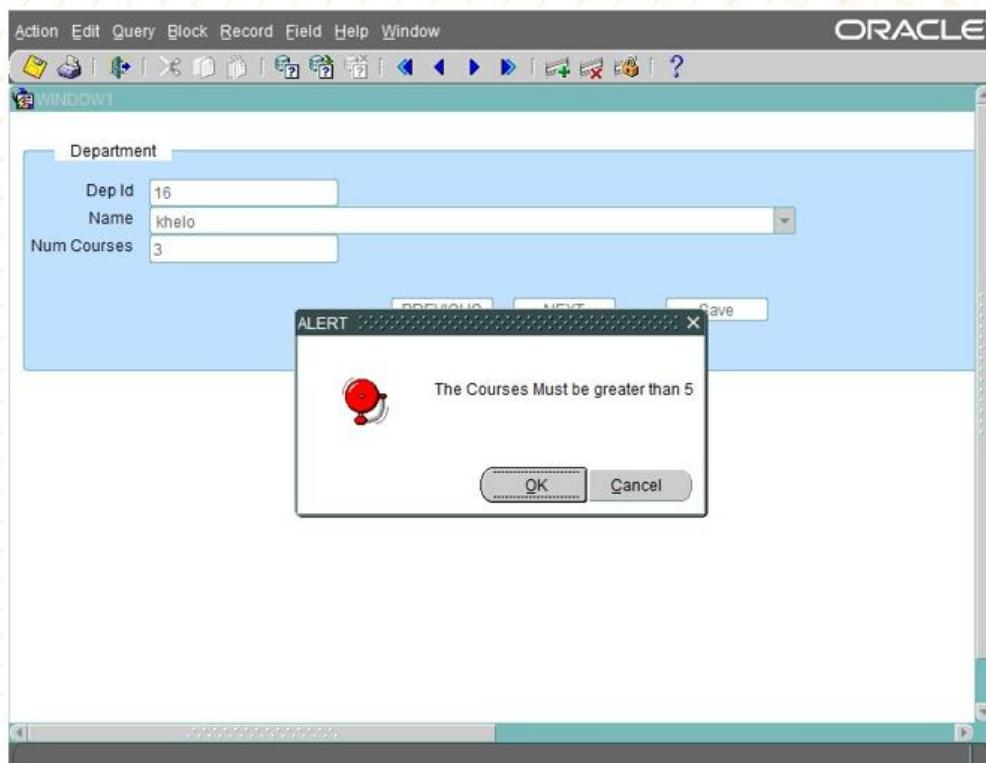


Figure 2 department interface condition (continued)

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

instrctor_info

| | |
|---------------------|--|
| Ins Id | 20254712 |
| First Name | kareem |
| Last Name | Karam |
| Speciality | Bioinformatics |
| Description | <input checked="" type="checkbox"/> |
| Academic Degree | Bachelor of computer science |
| Pervious Experiance | He received training in 57357 Hospital |
| | 10 |

PREVIOUS NEXT

Course

| Course Id | Name | |
|-----------|---------------------------------|-----|
| 1000 | Machine Learning Specialization | 120 |
| | | |
| | | |
| | | |

Figure 3 interface of instructor information and course

Action Edit Query Block Record Field Help Window

ORACLE

Price Min Number Max Number Discount Code Dep Id Ins Id

| | | | | | |
|-----|---|-------|--|--|----------|
| 200 | 1 | 12000 | | | 20254712 |
| | | | | | |
| | | | | | |
| | | | | | |

Figure 4 instructor and course (continued)

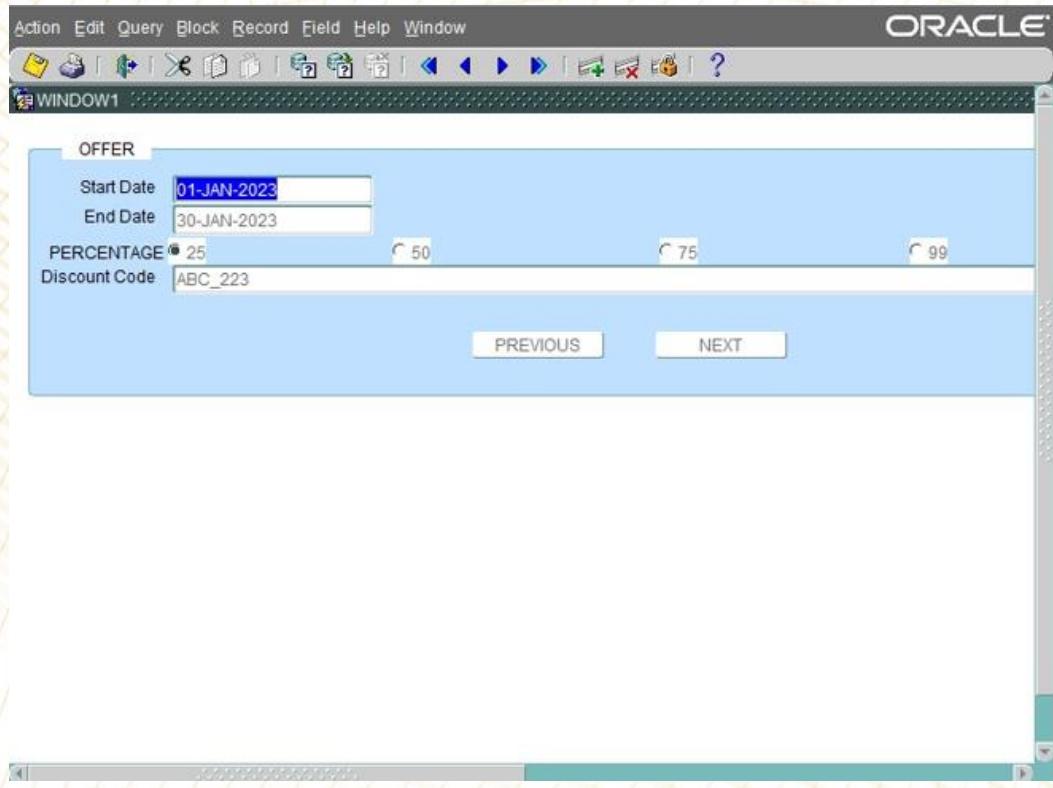


Figure 5 offers interface

Steps of designing the interface:

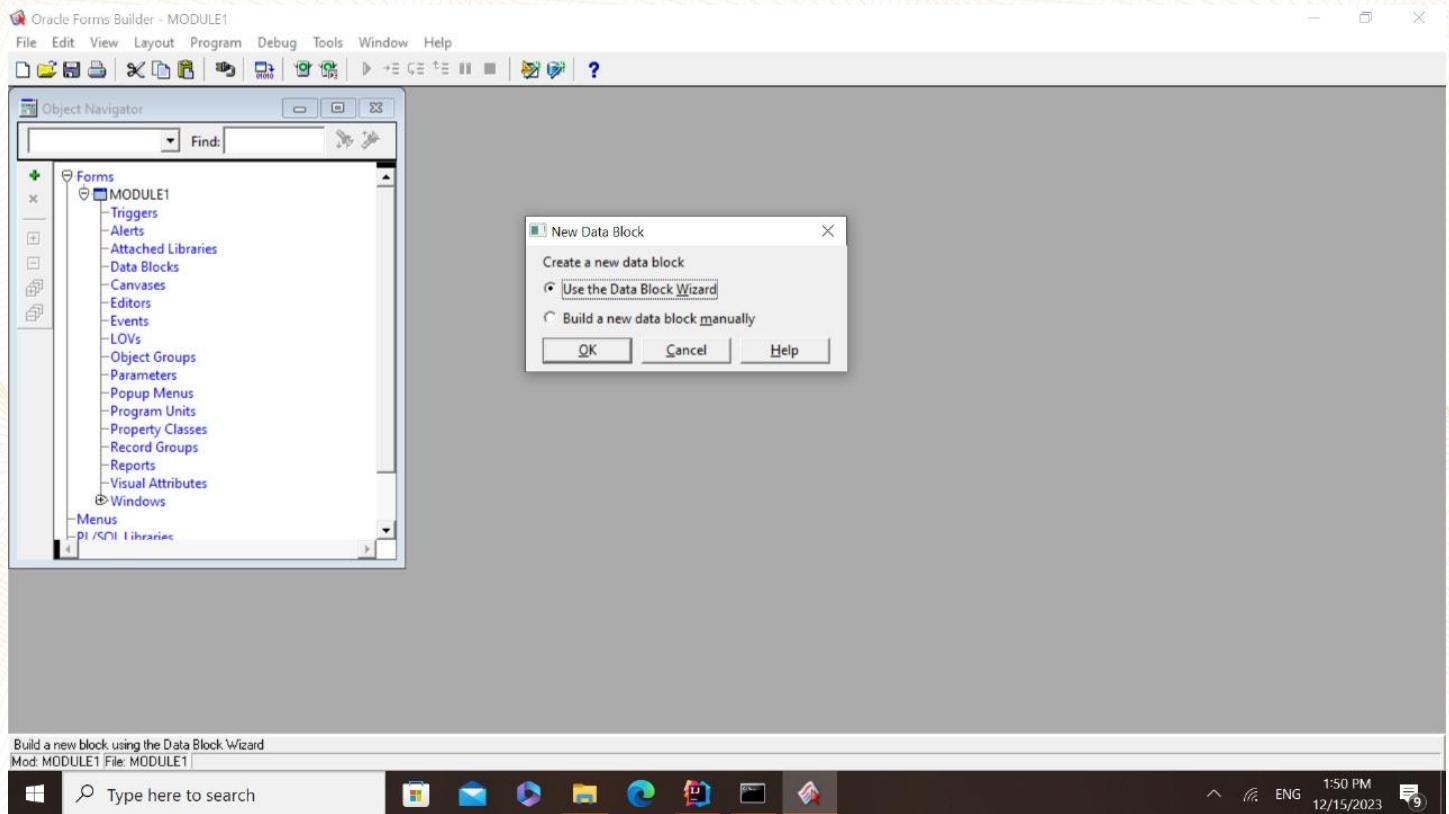


Figure 6 step 1

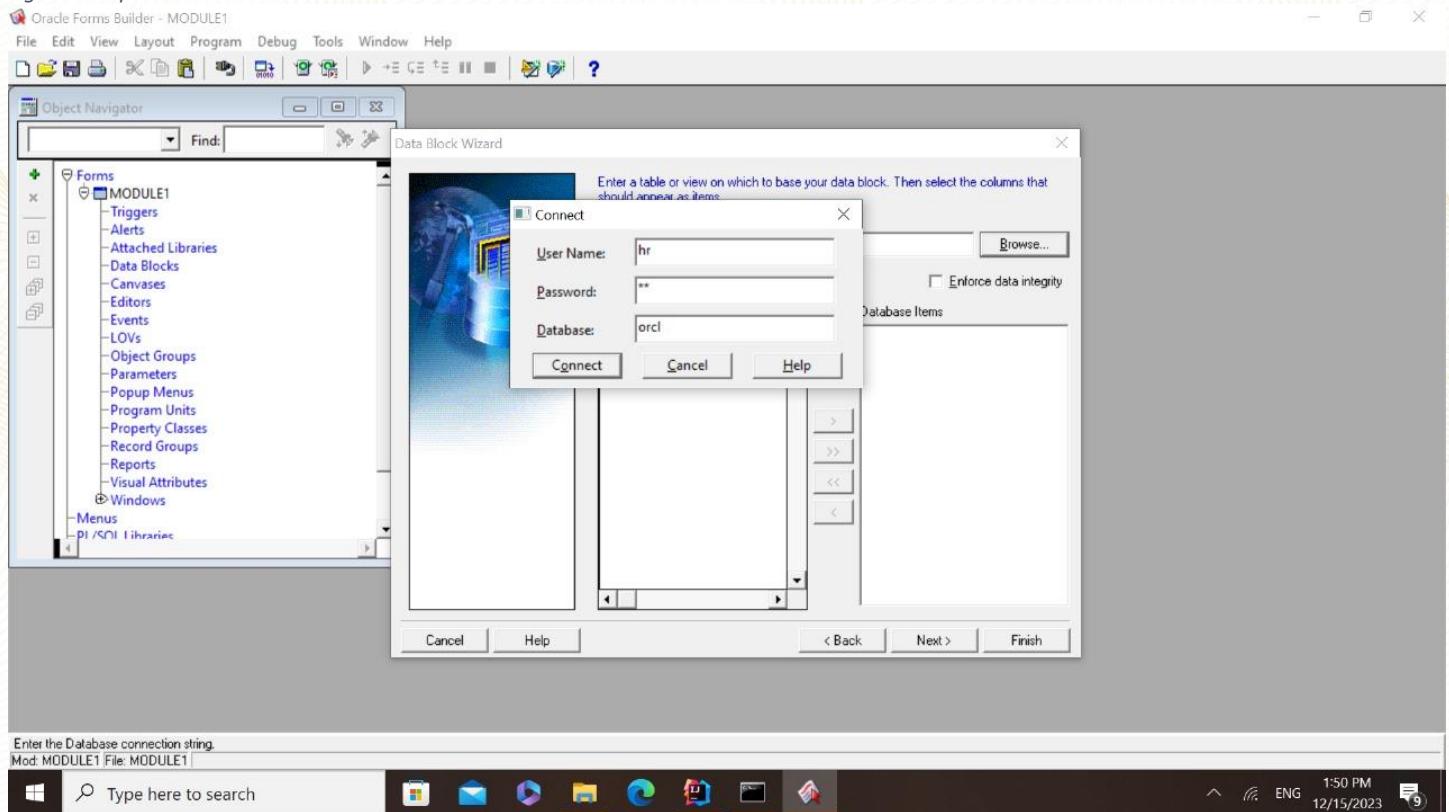


Figure 7 step 2

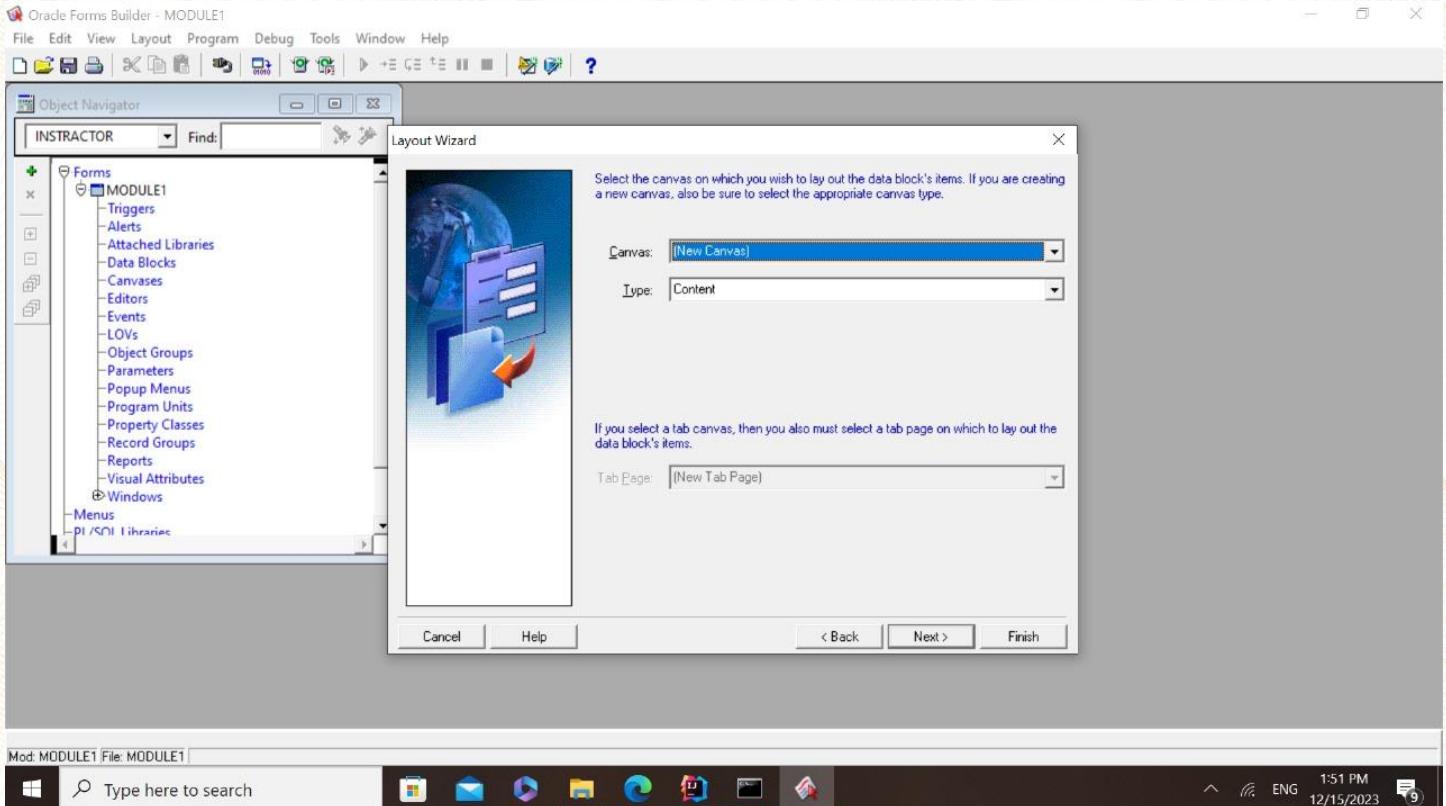


Figure 8 step 3

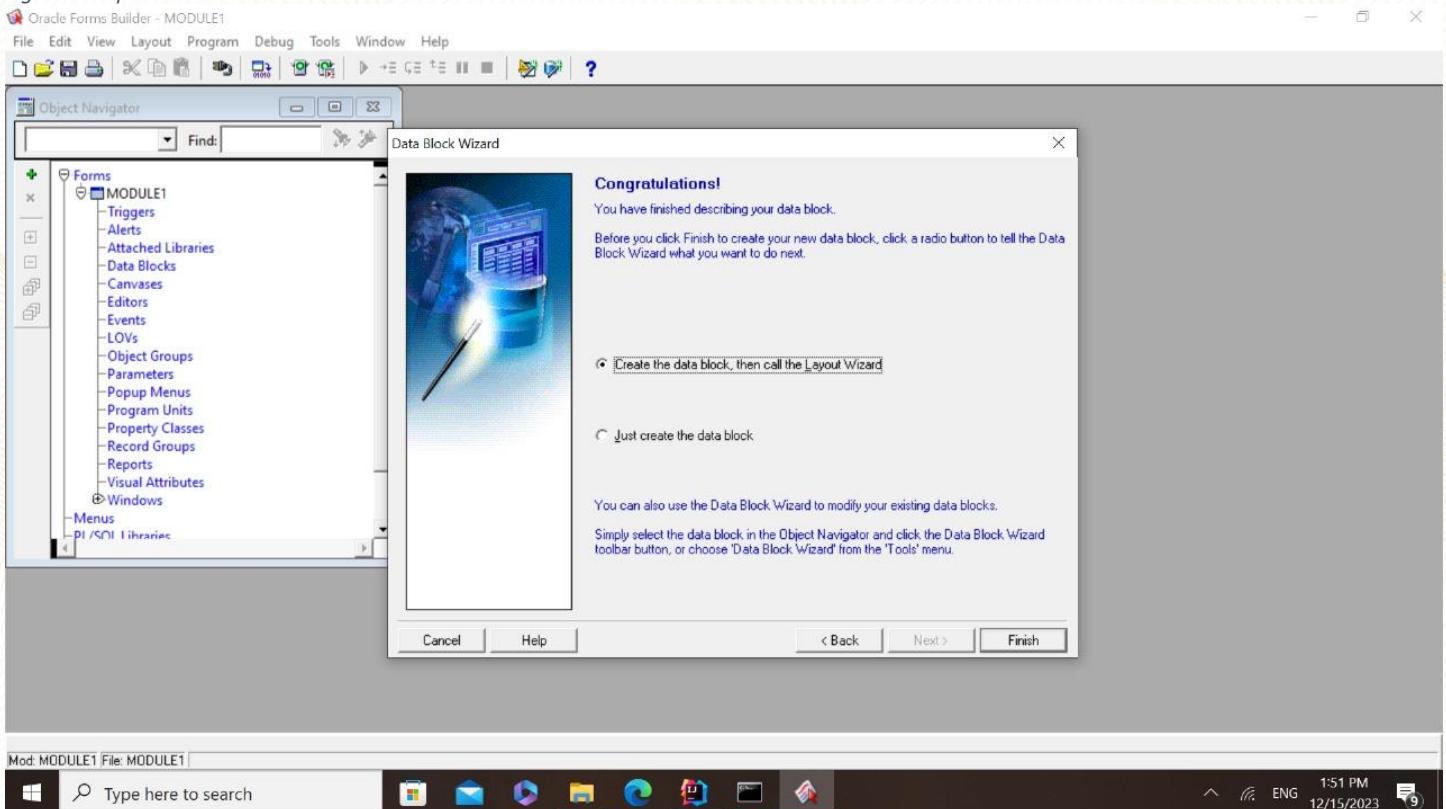


Figure 9 step 4

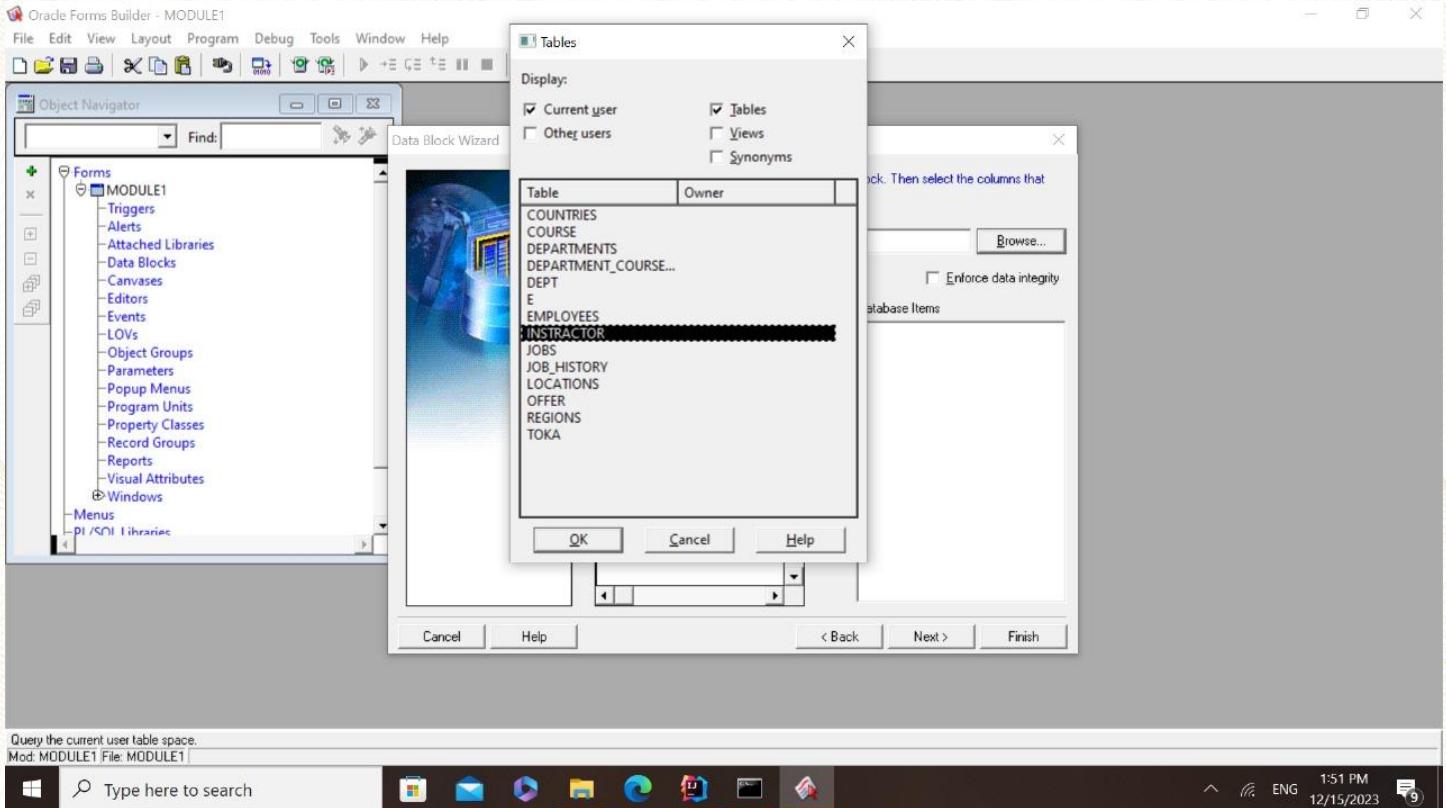


Figure 10 step 5

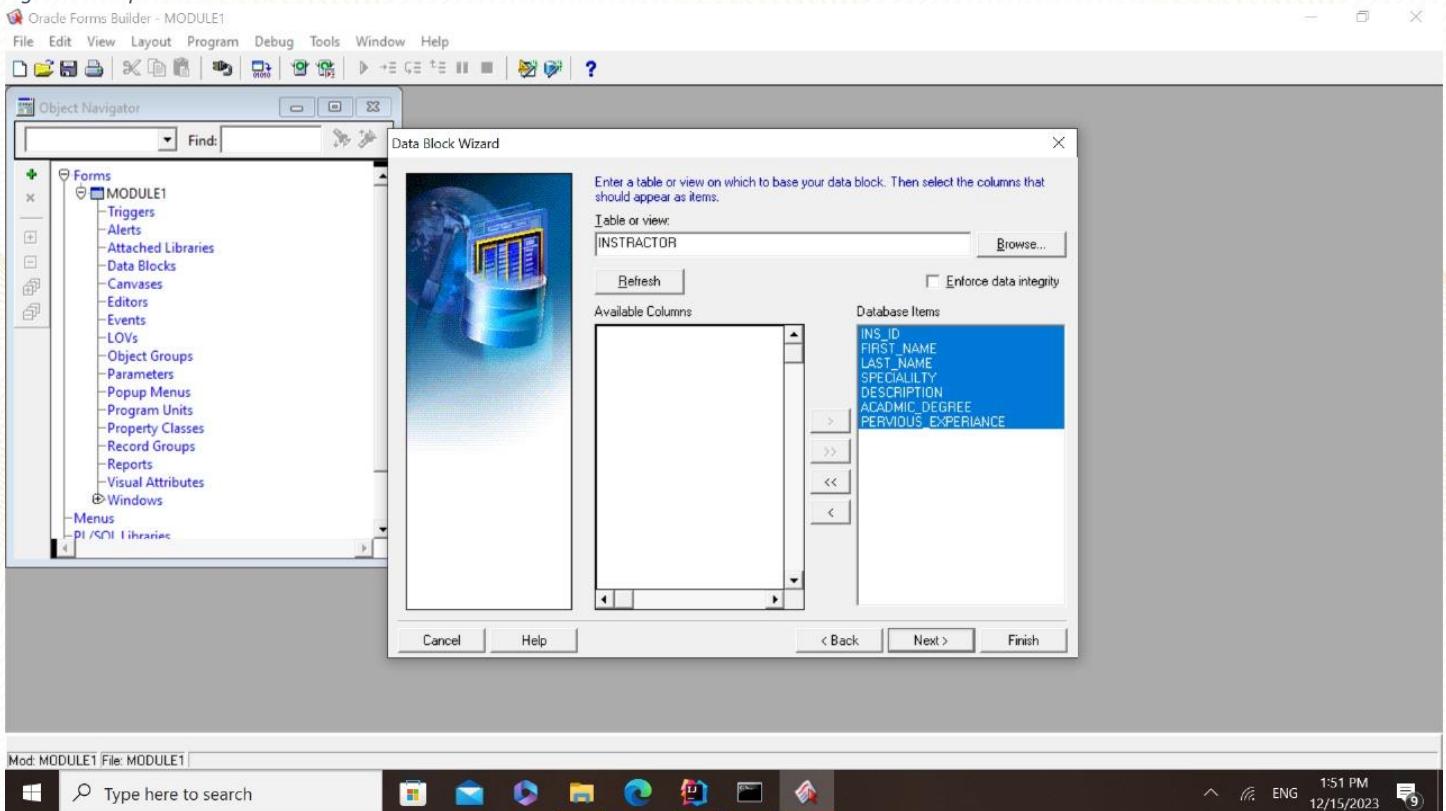


Figure 11 step 6

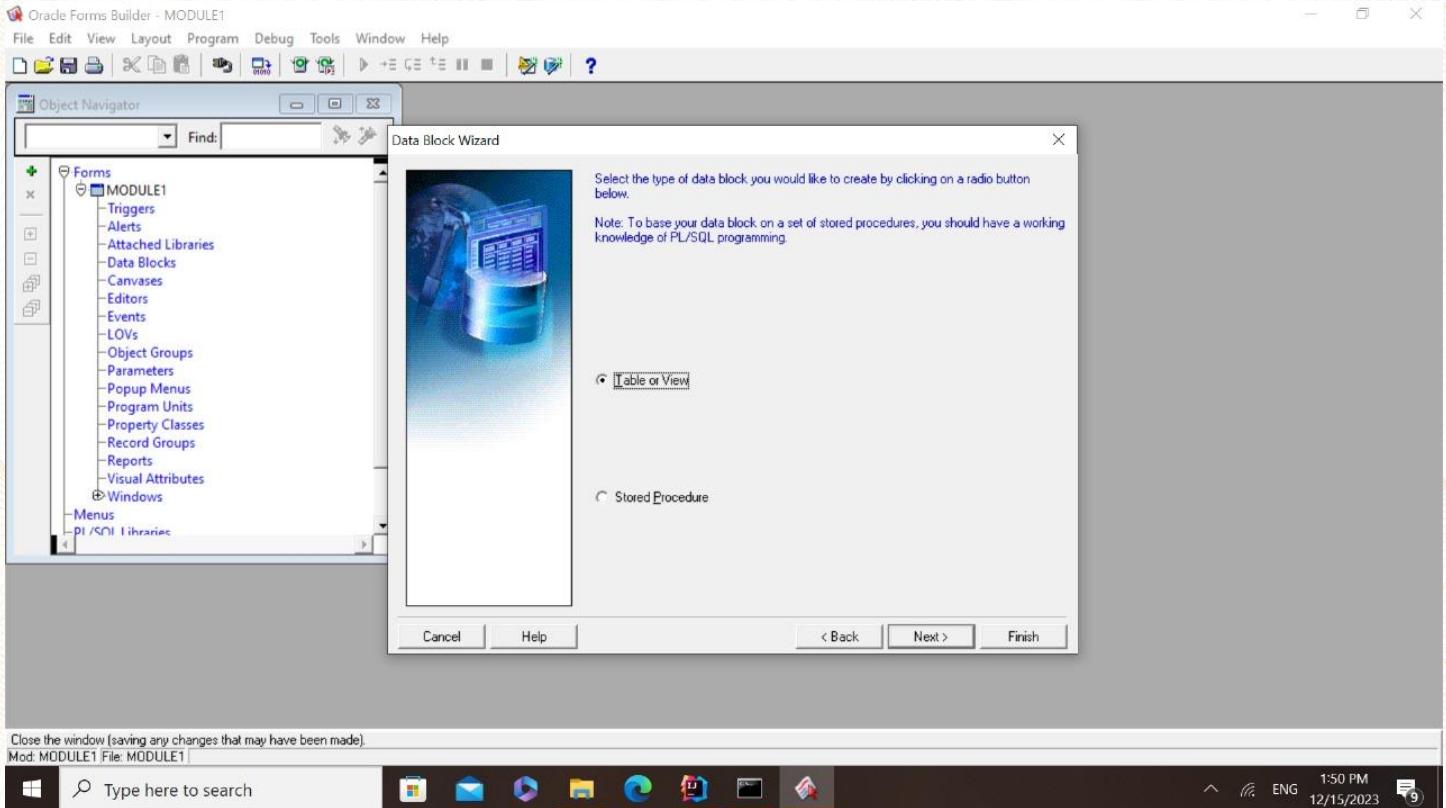


Figure 12 step 7

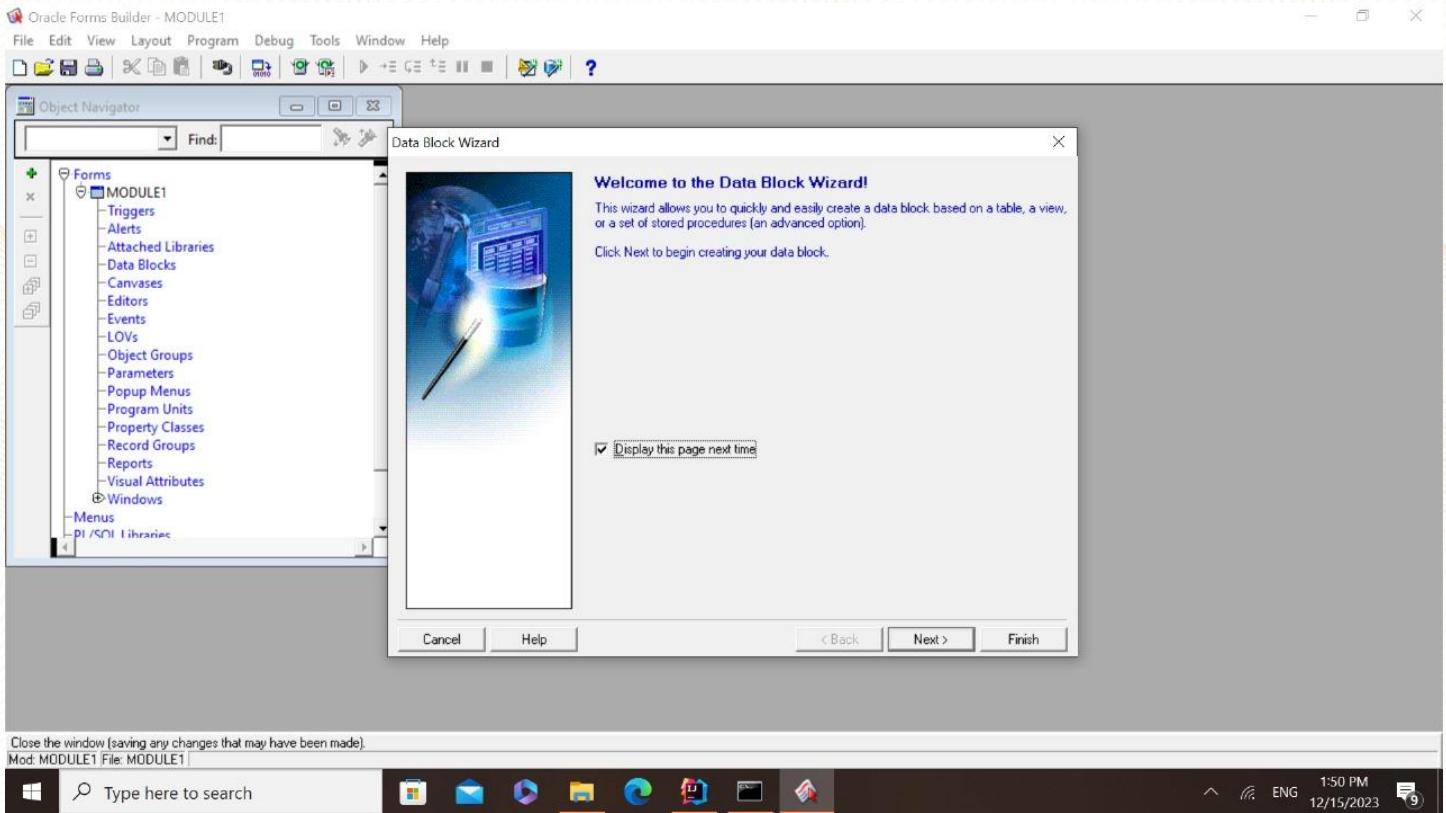


Figure 13 step 8

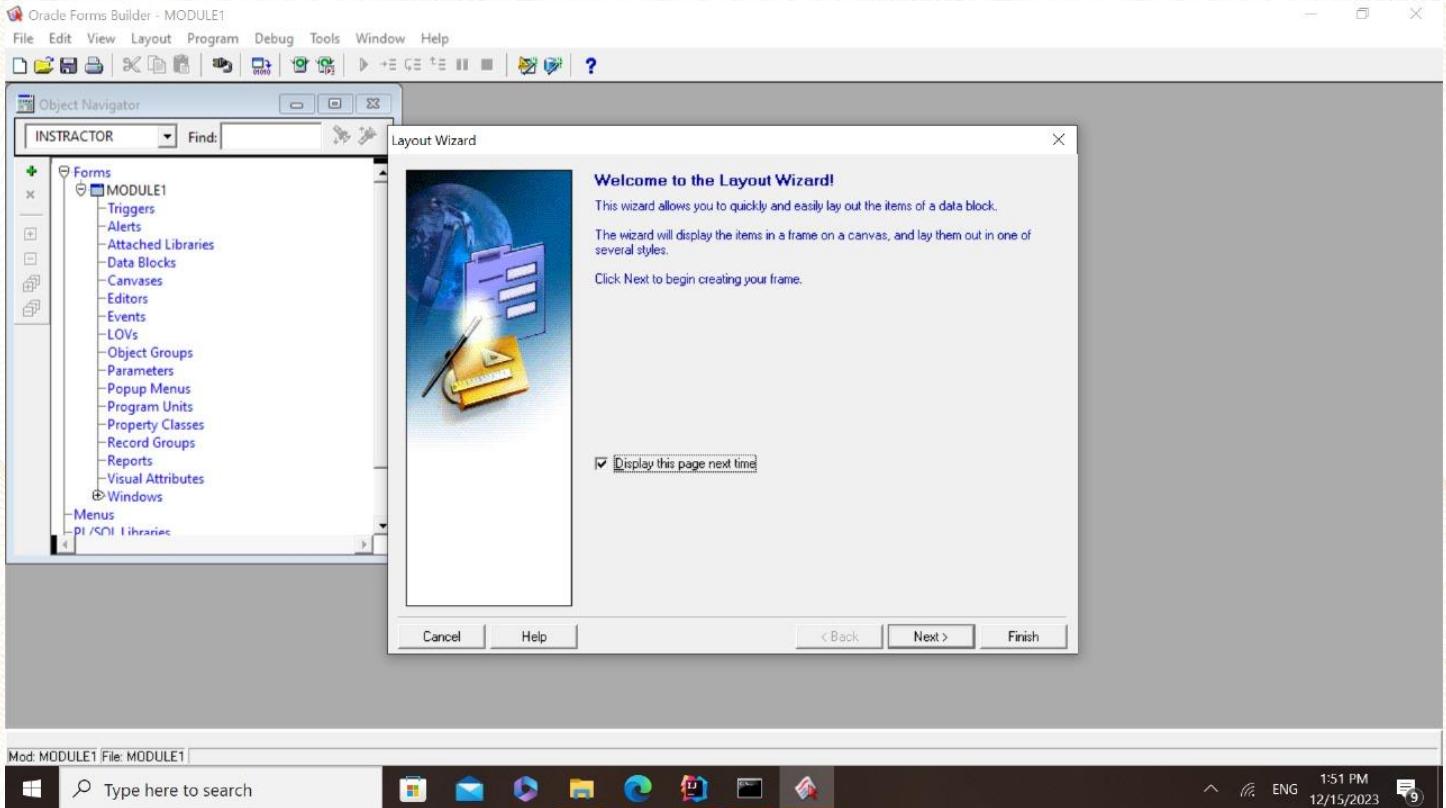


Figure 14 step 9

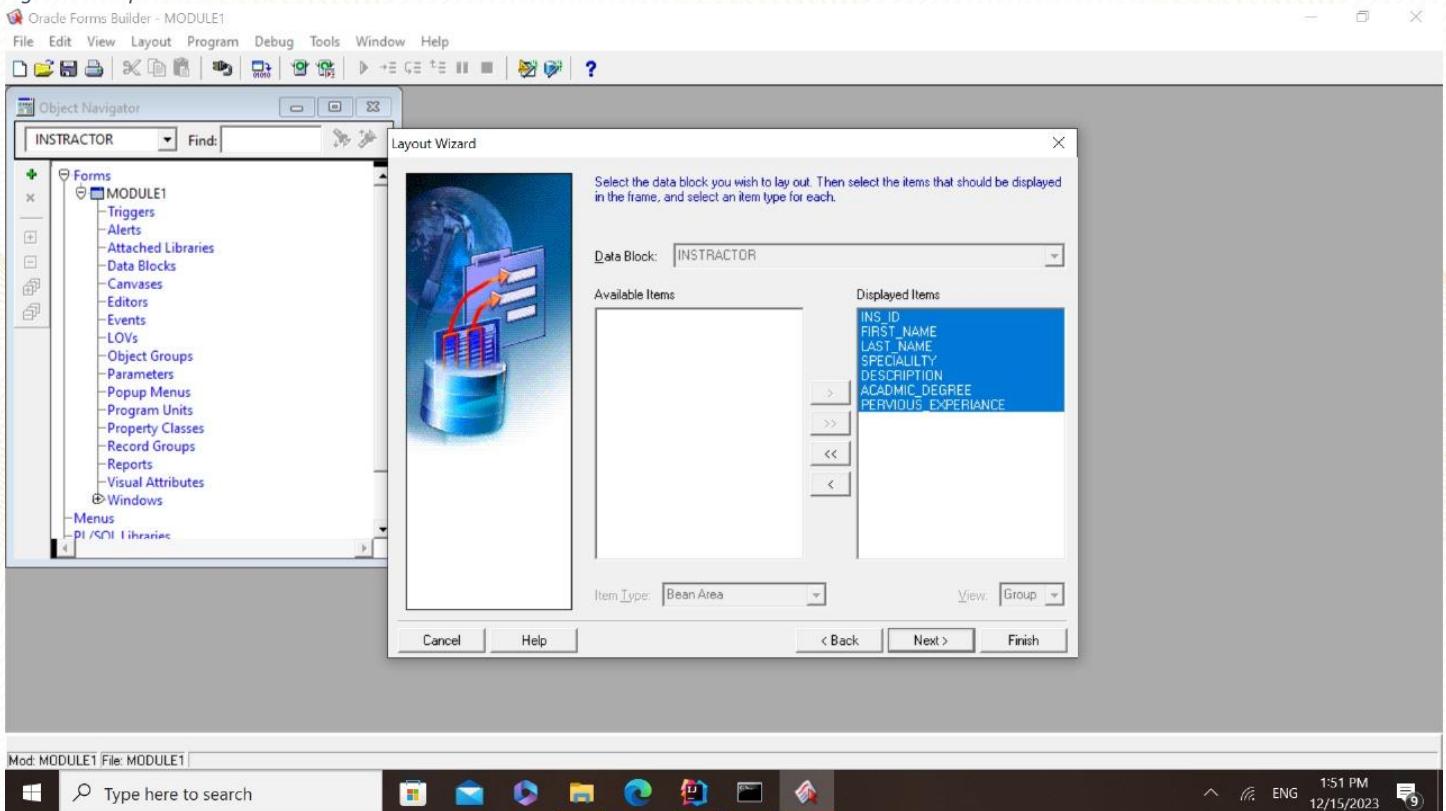


Figure 15 step 10

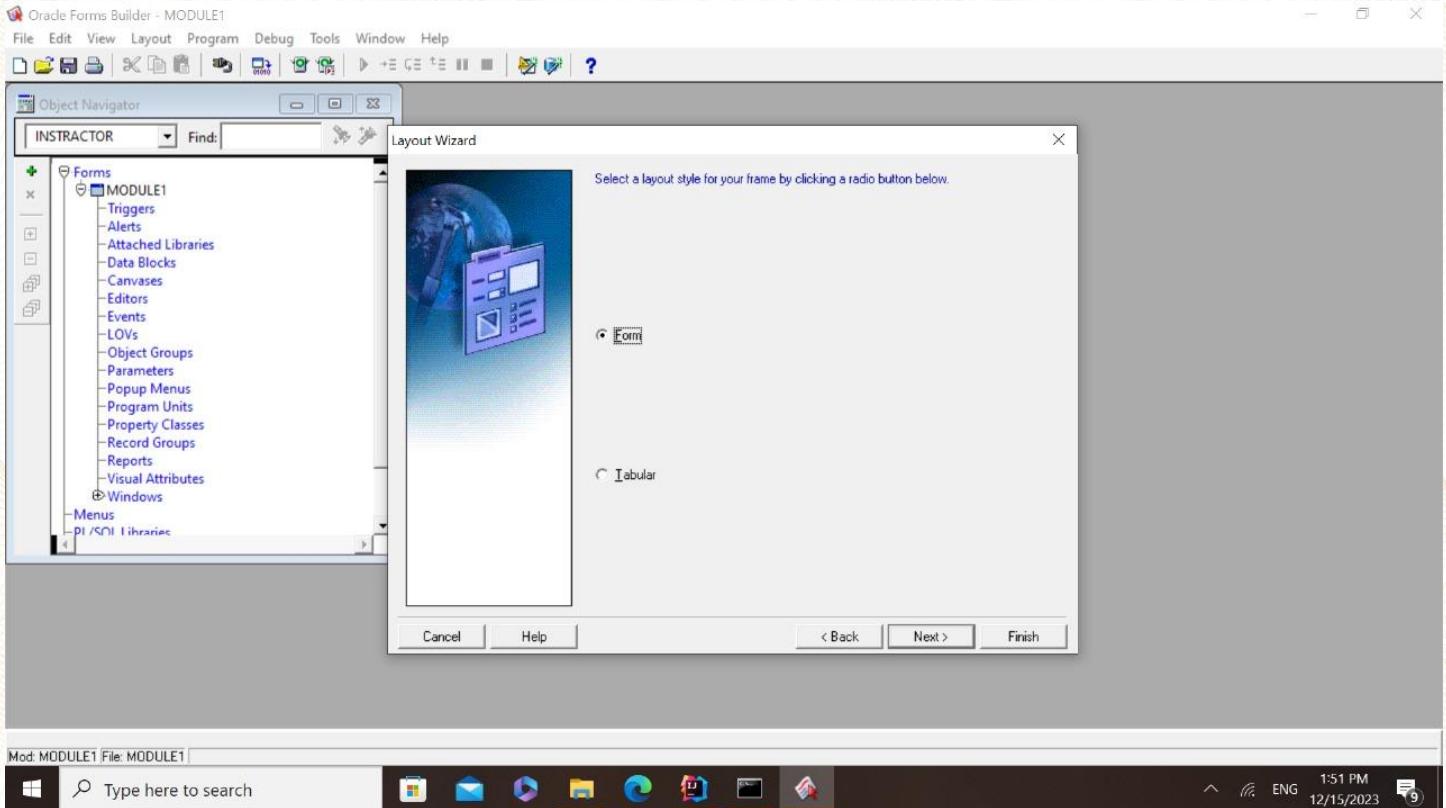


Figure 16 step 11

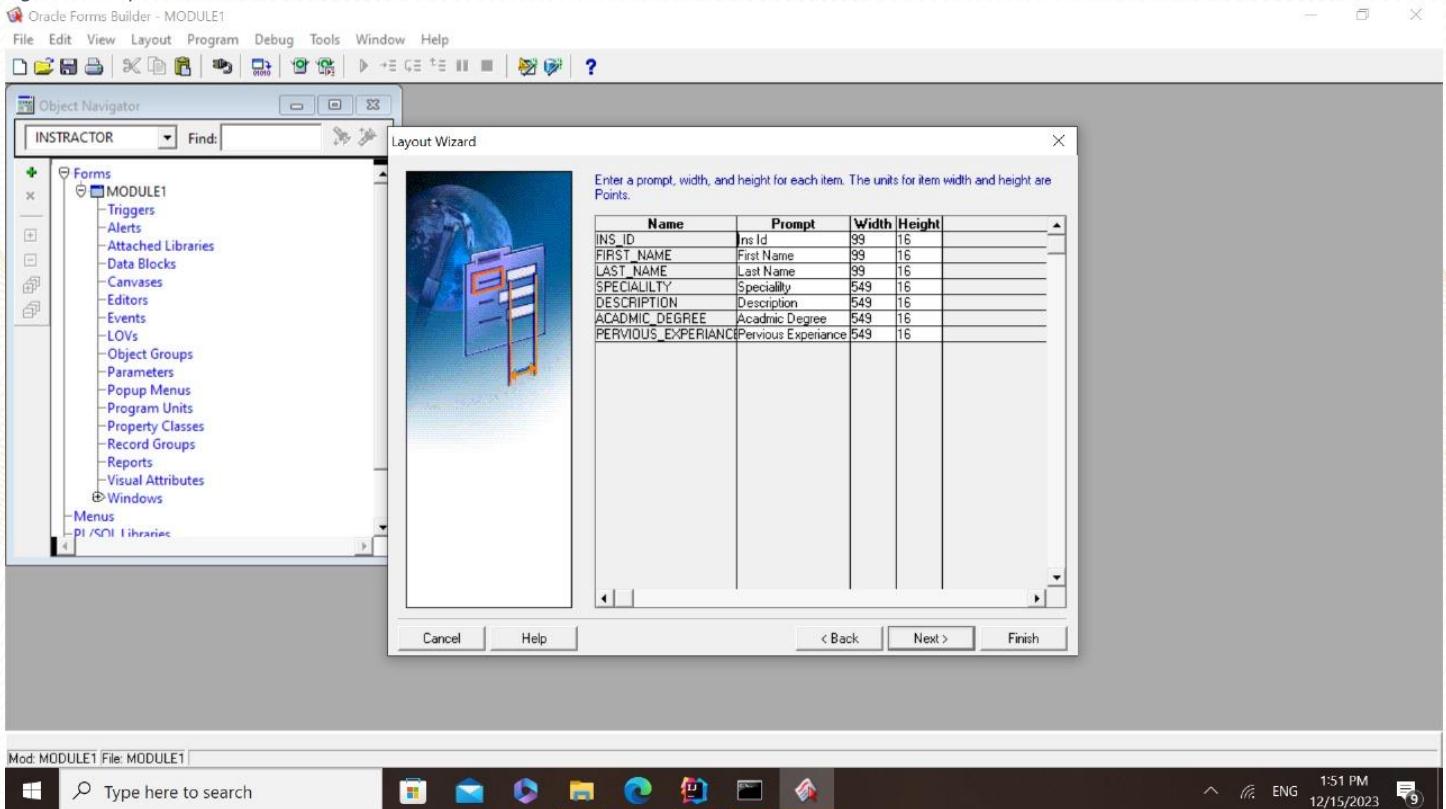


Figure 17 step 12

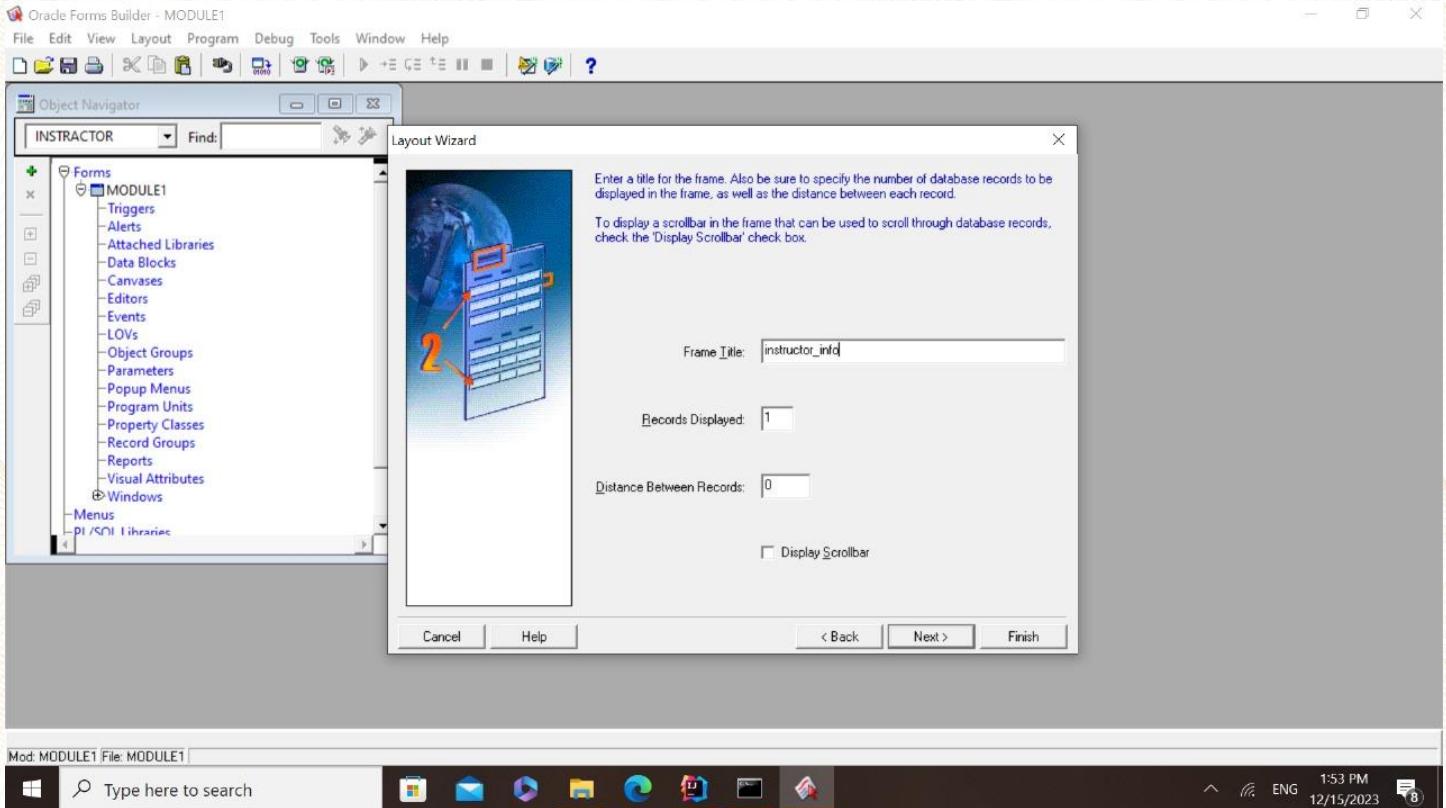


Figure 18 step 13

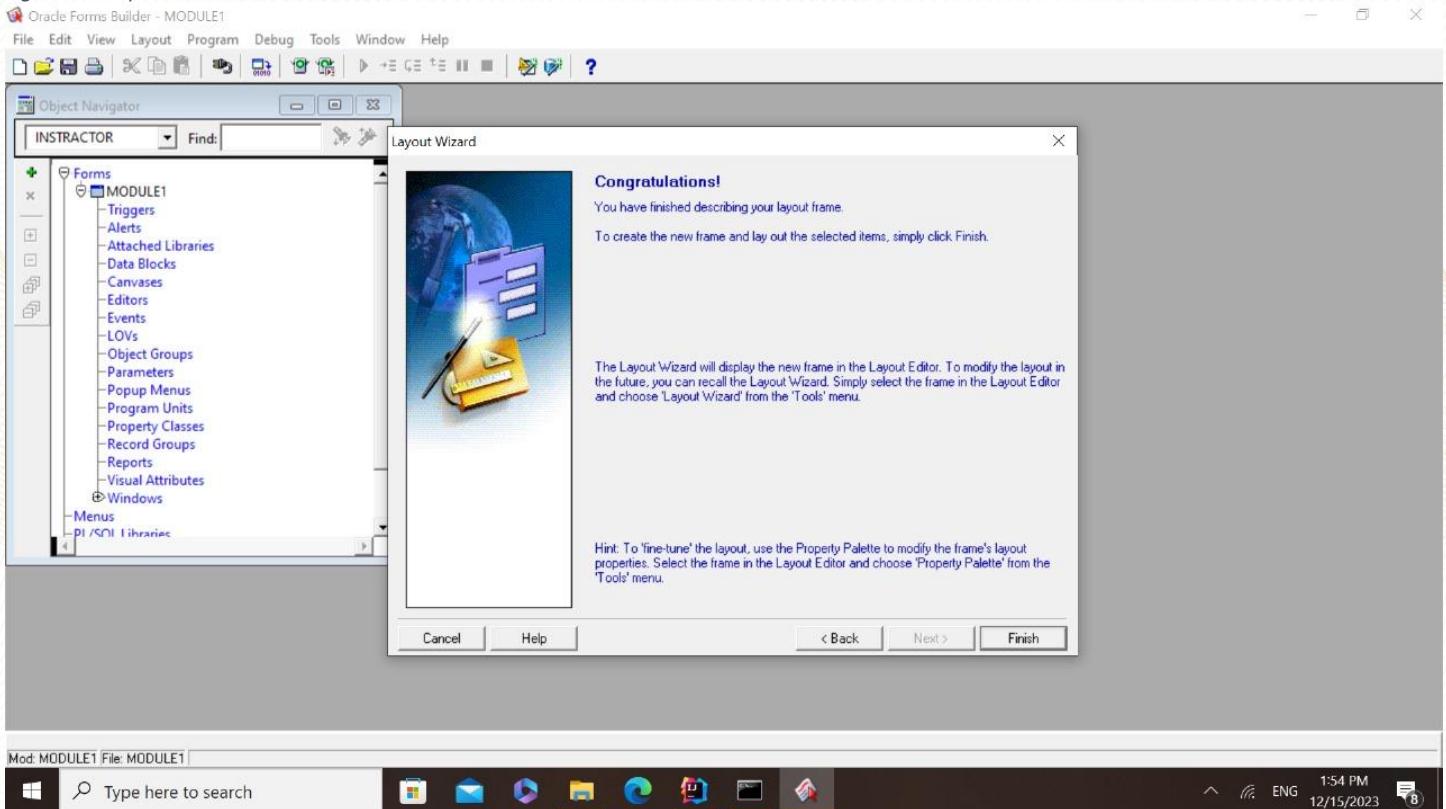


Figure 19 step 14

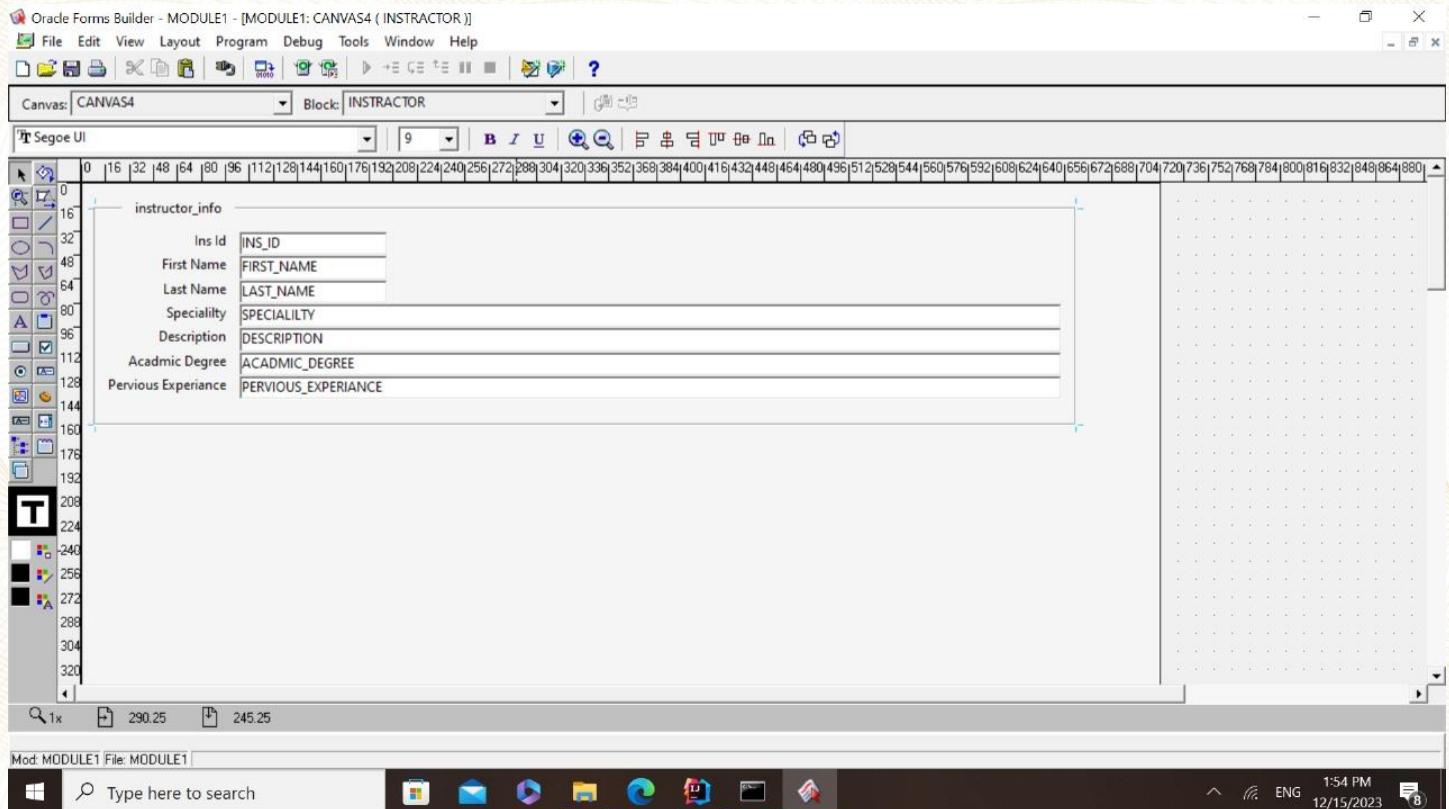


Figure 20 step 15

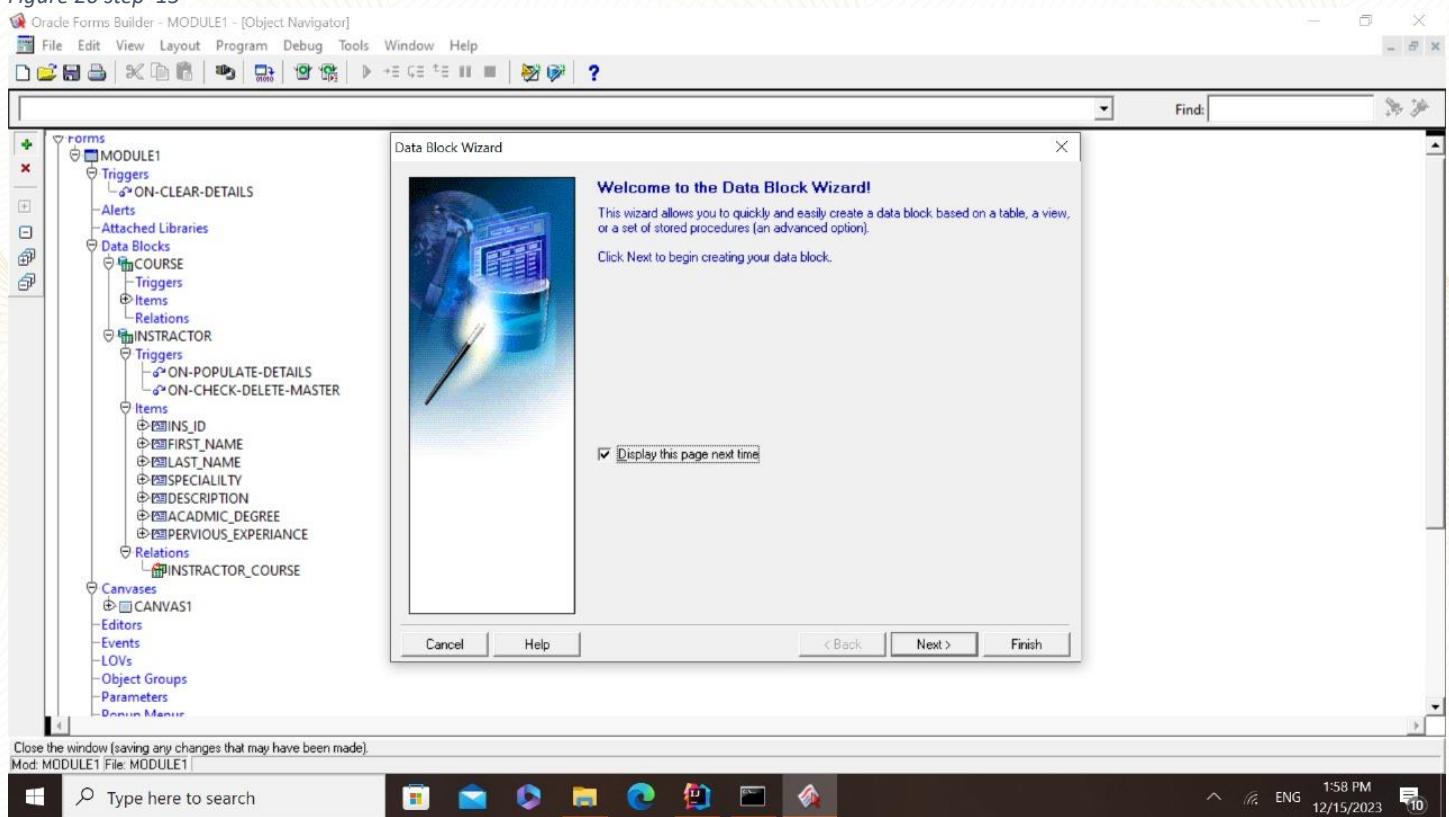


Figure 21 step 16

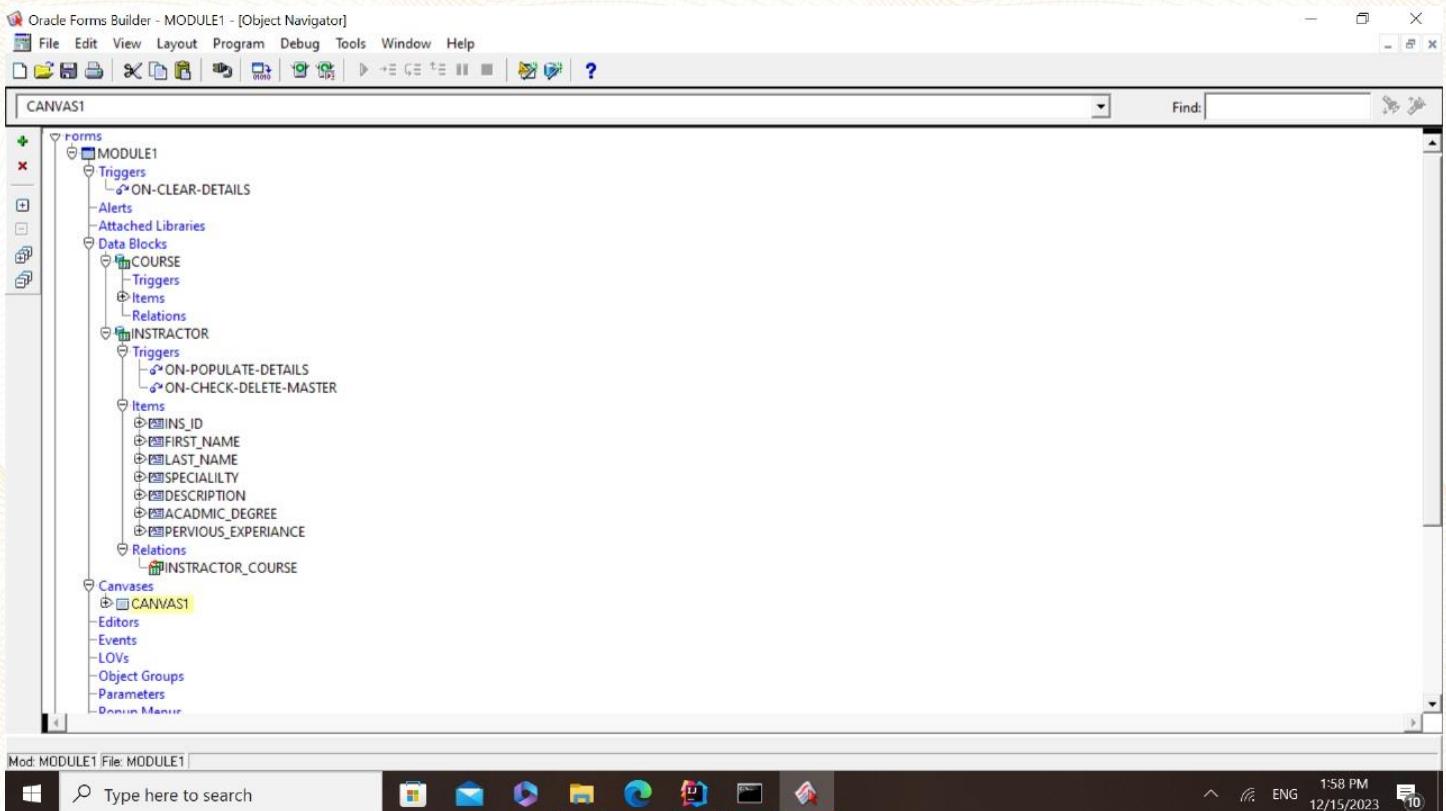


Figure 22 step 17

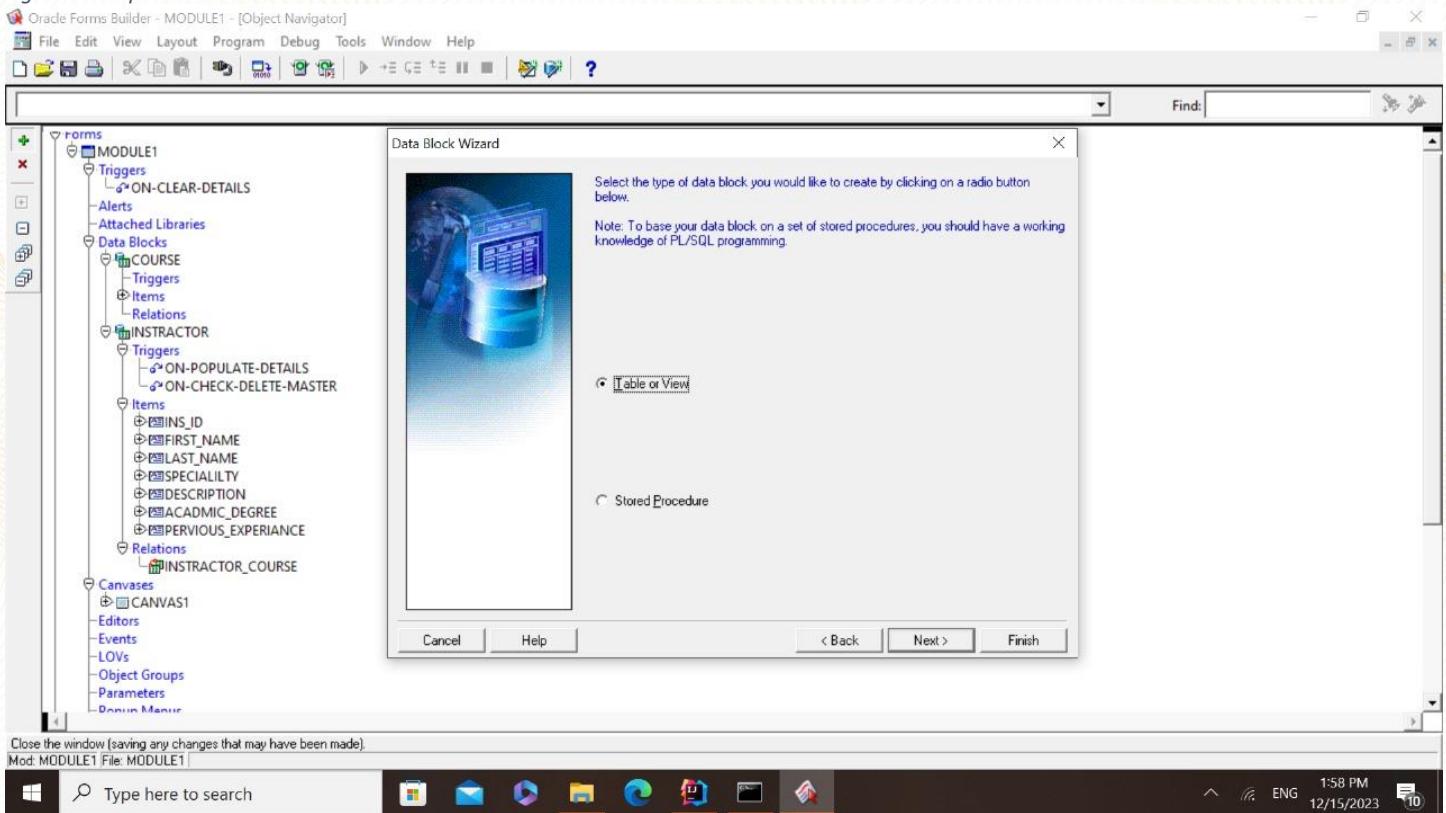


Figure 23 step 18

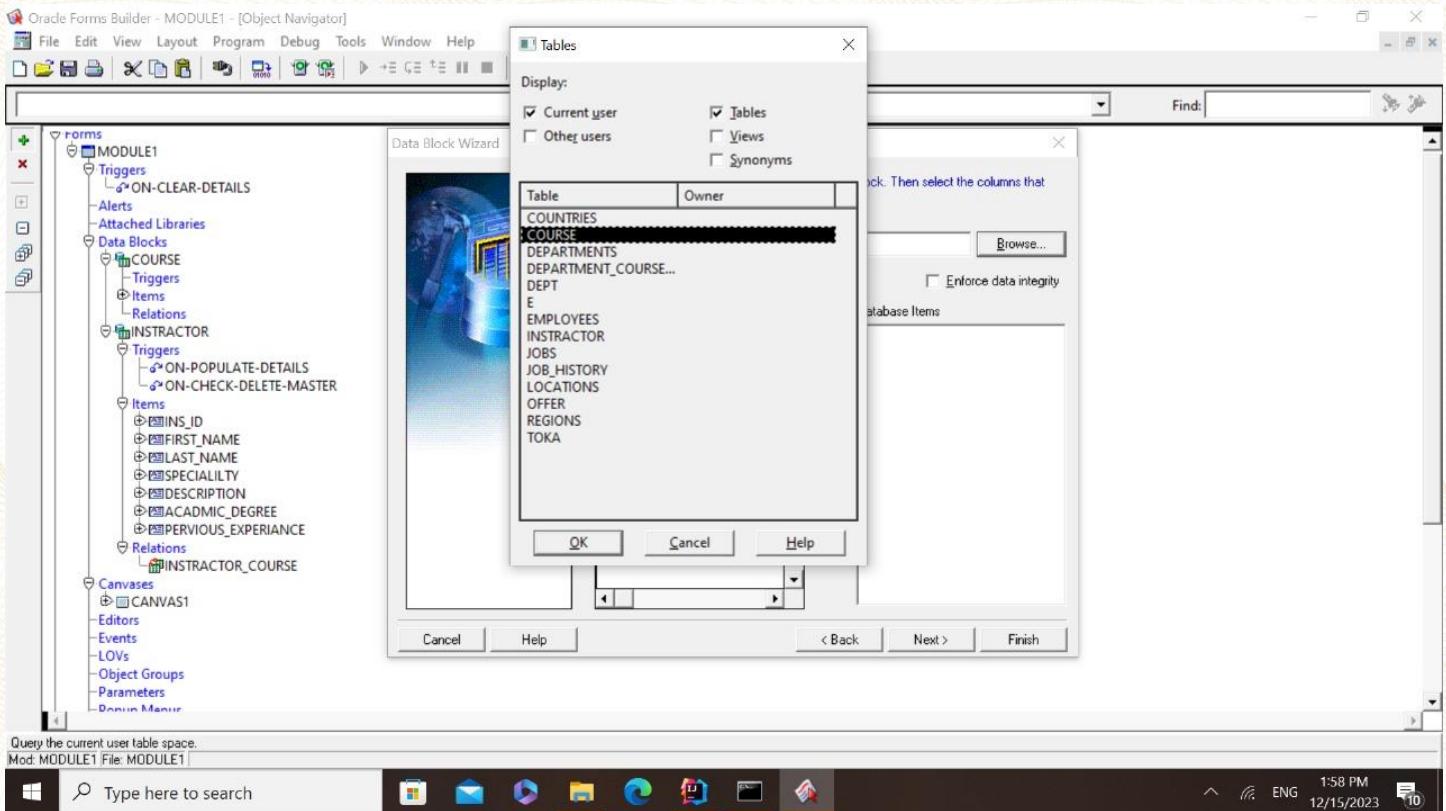


Figure 24 step 19

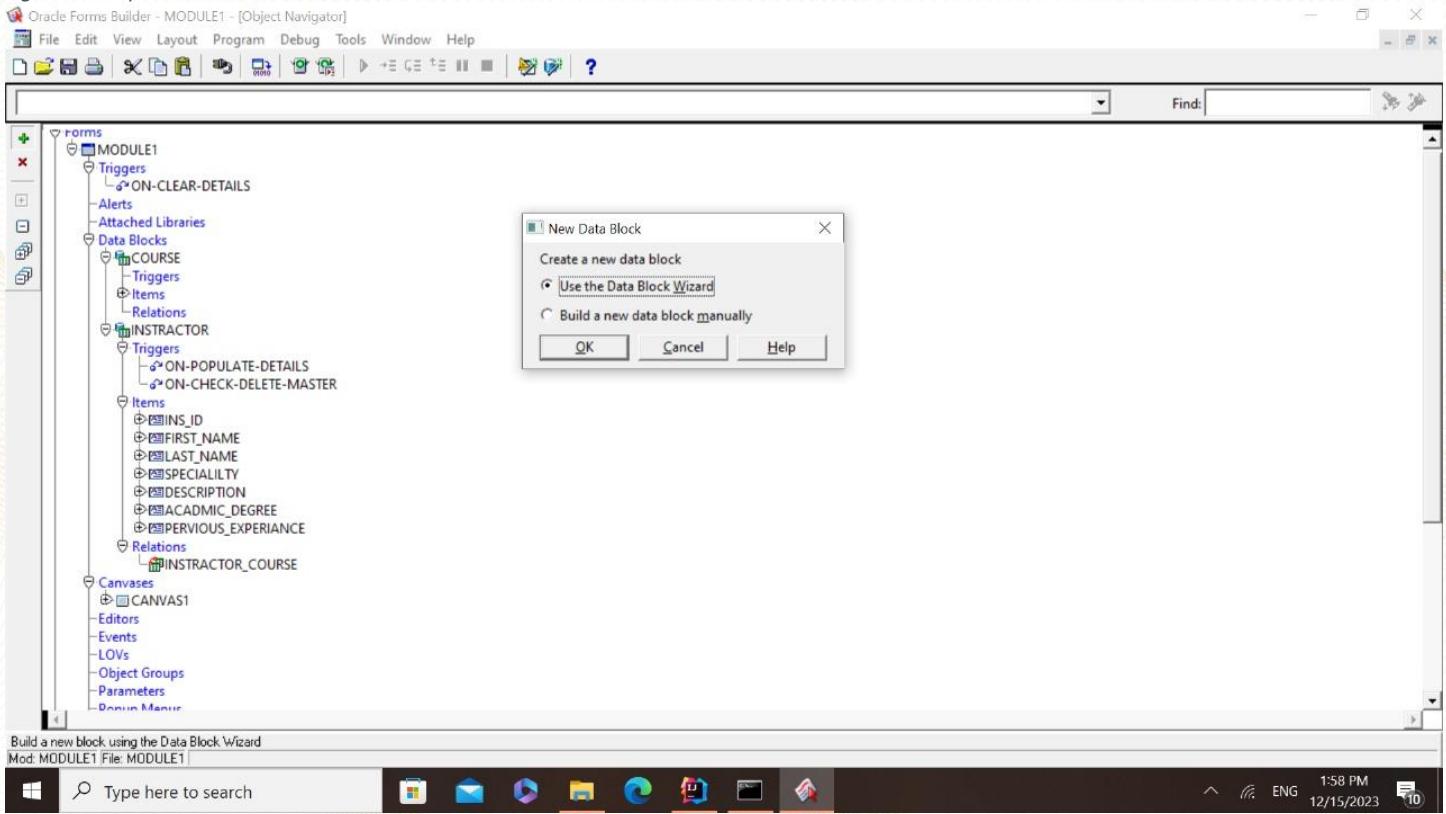


Figure 25 step 20

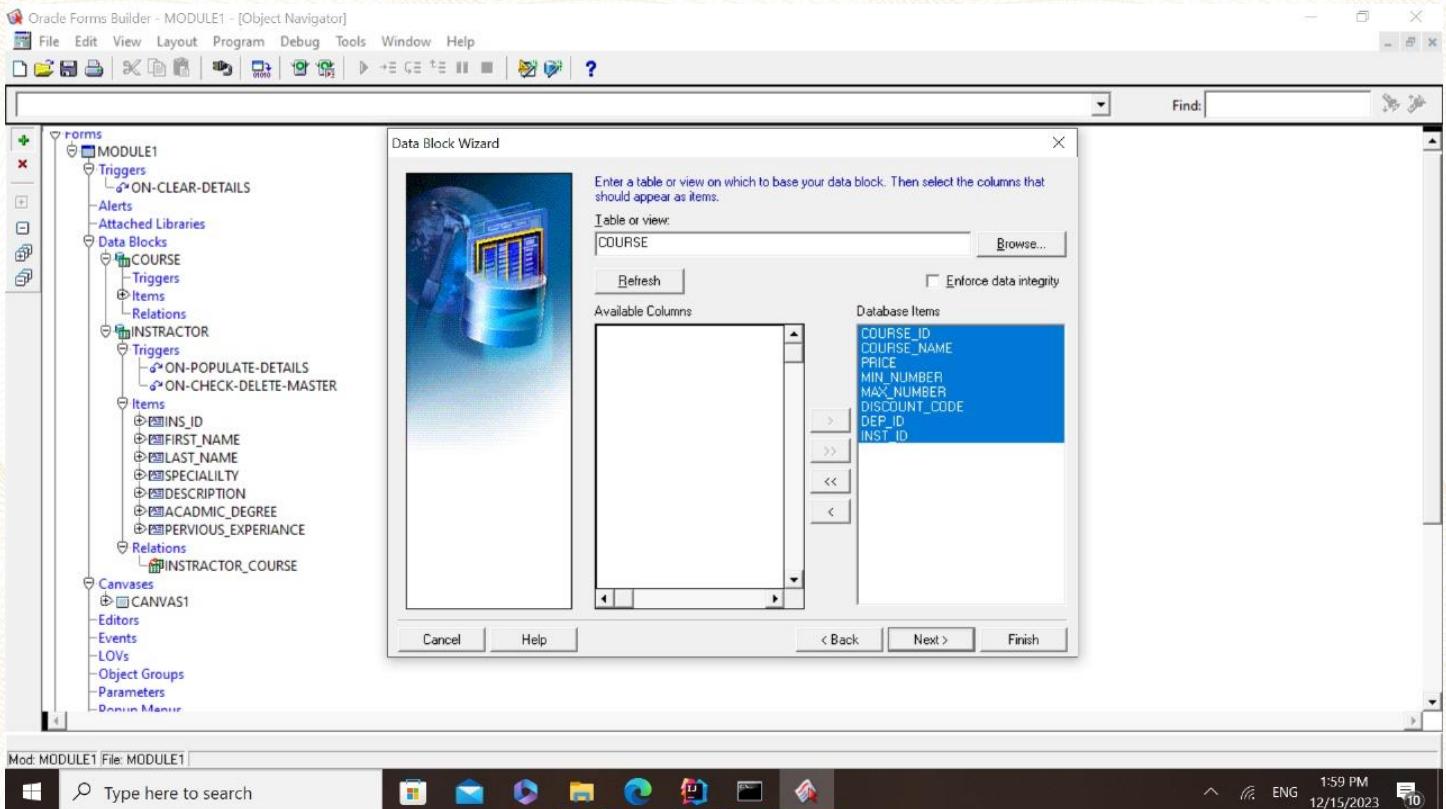


Figure 26 step 21

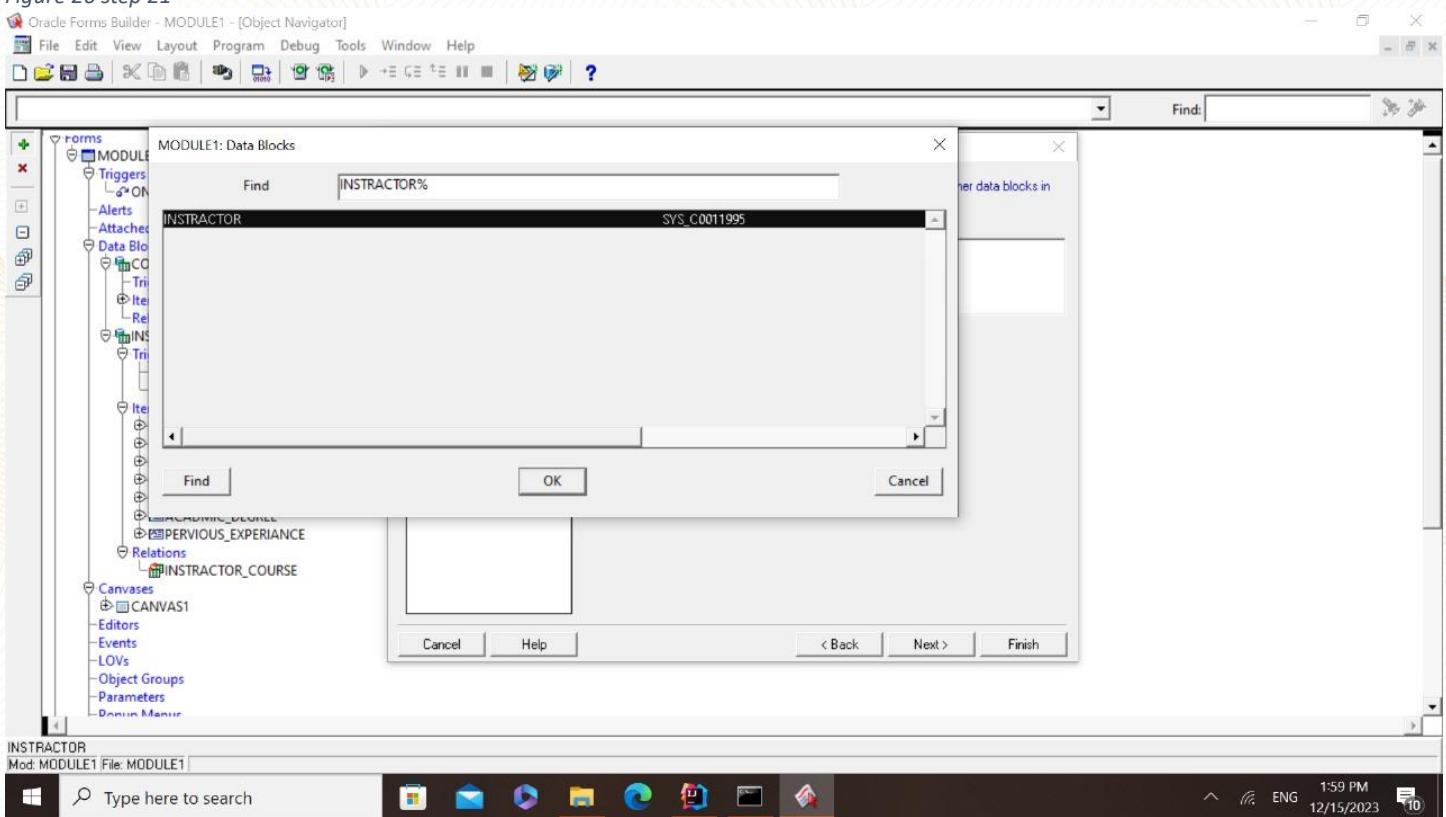


Figure 27 step 22

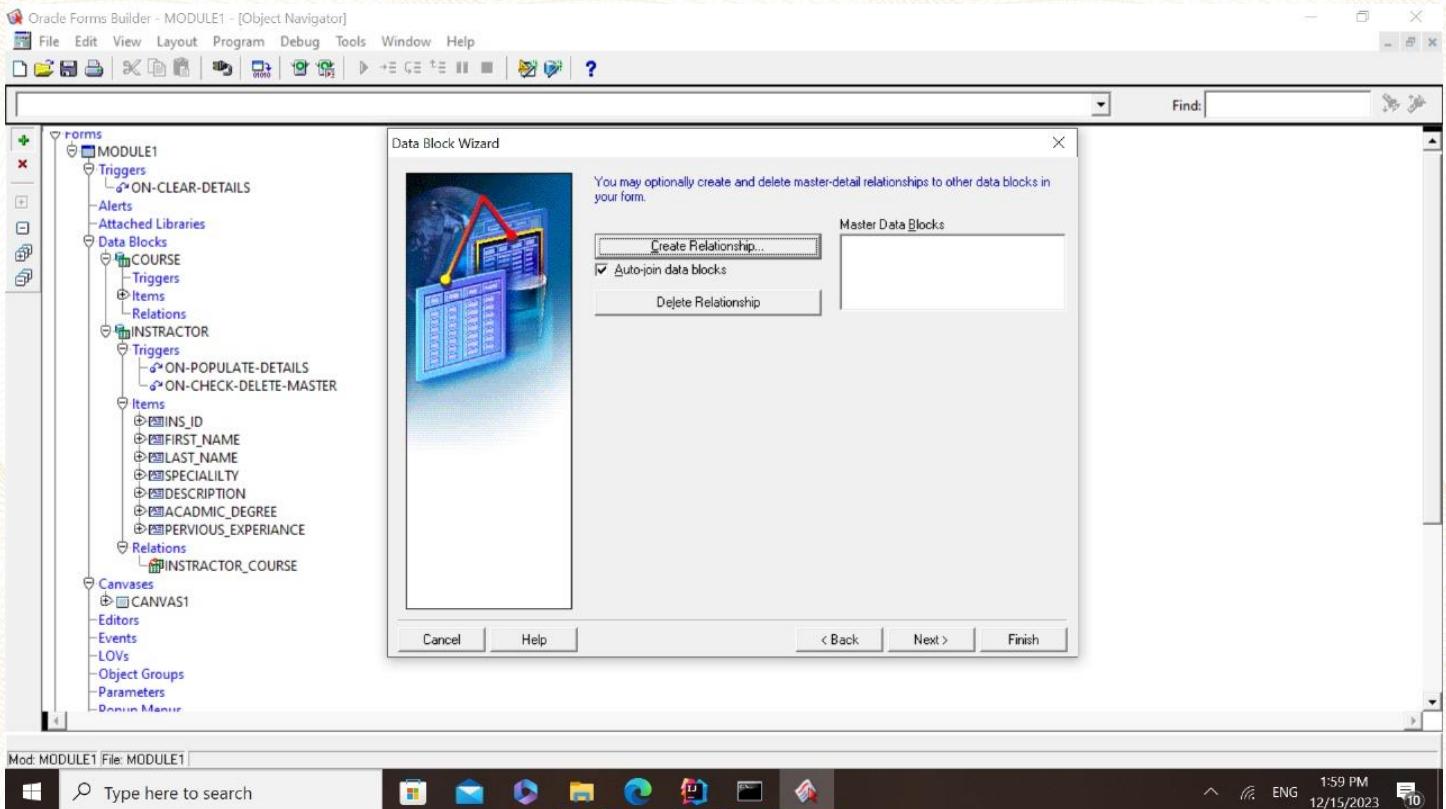


Figure 28 step 23

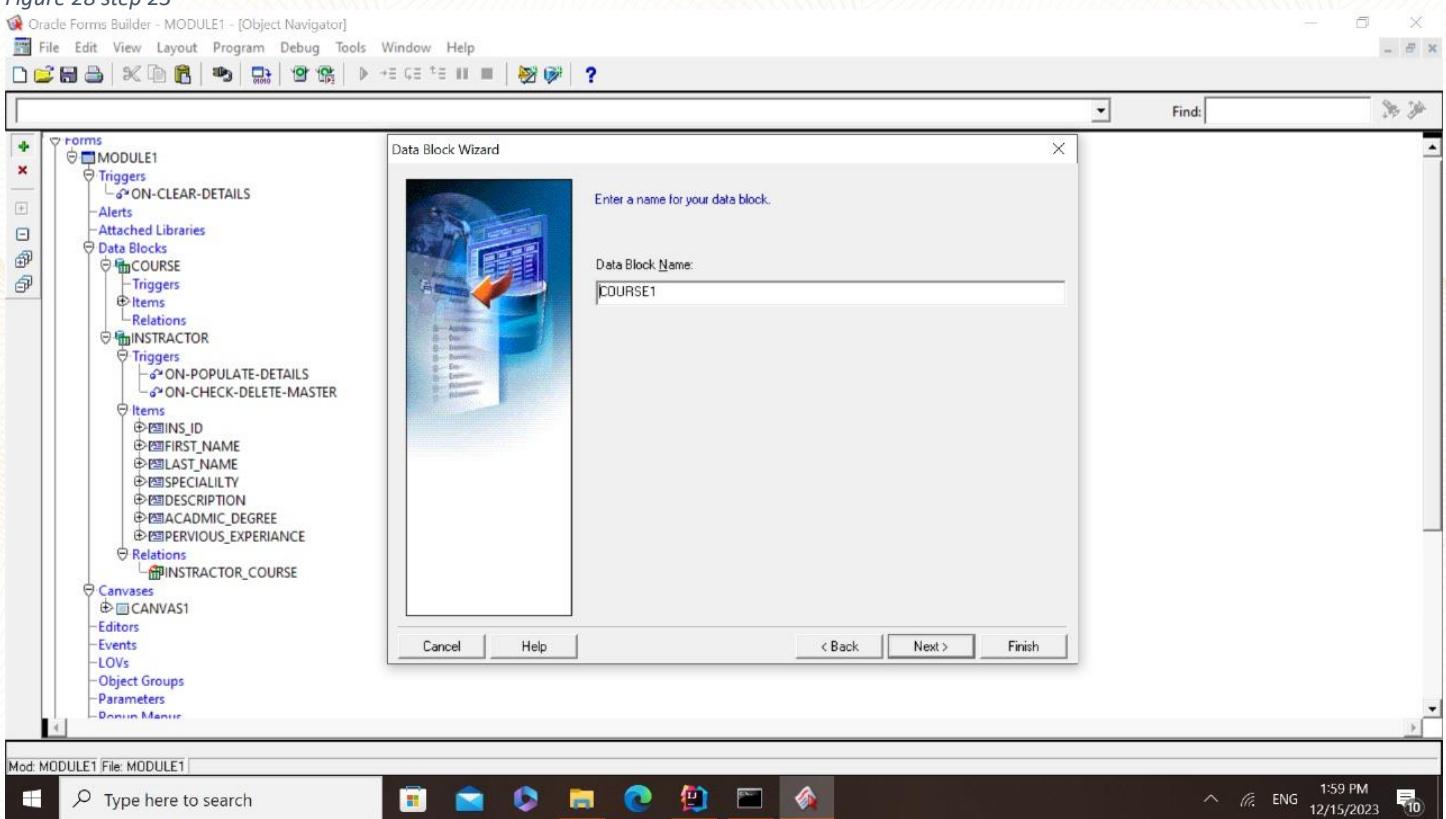


Figure 29 step 24

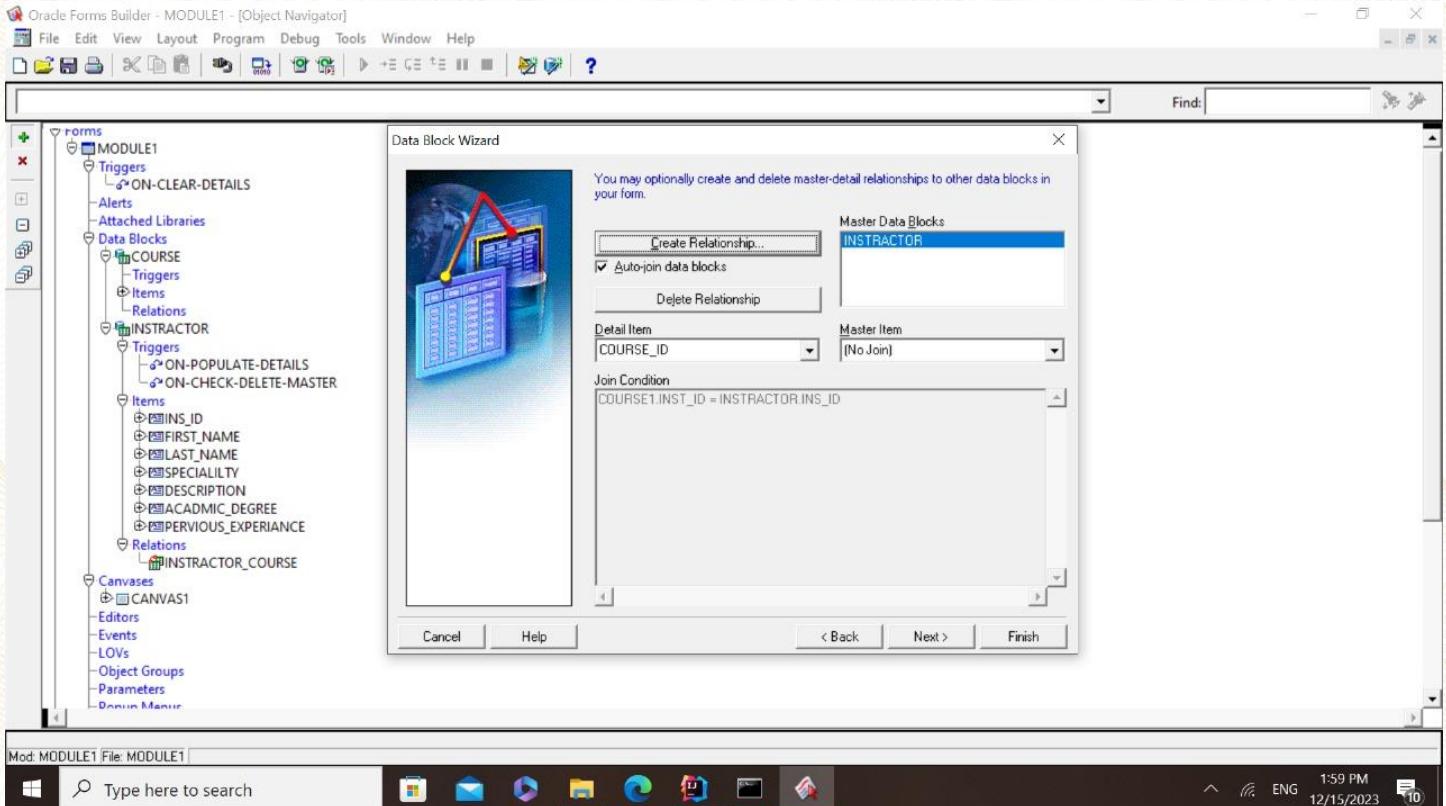


Figure 30 step 25

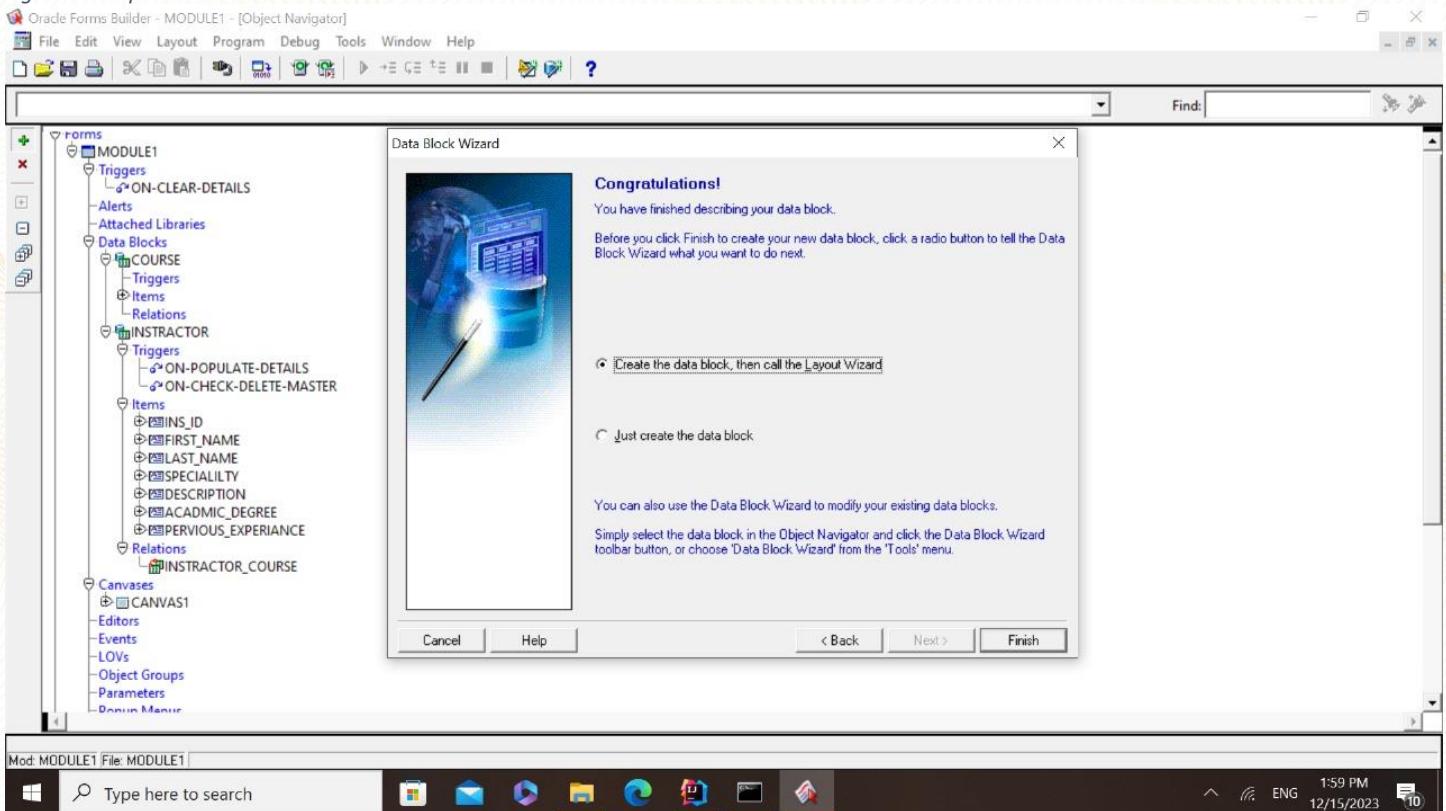


Figure 31 step 26

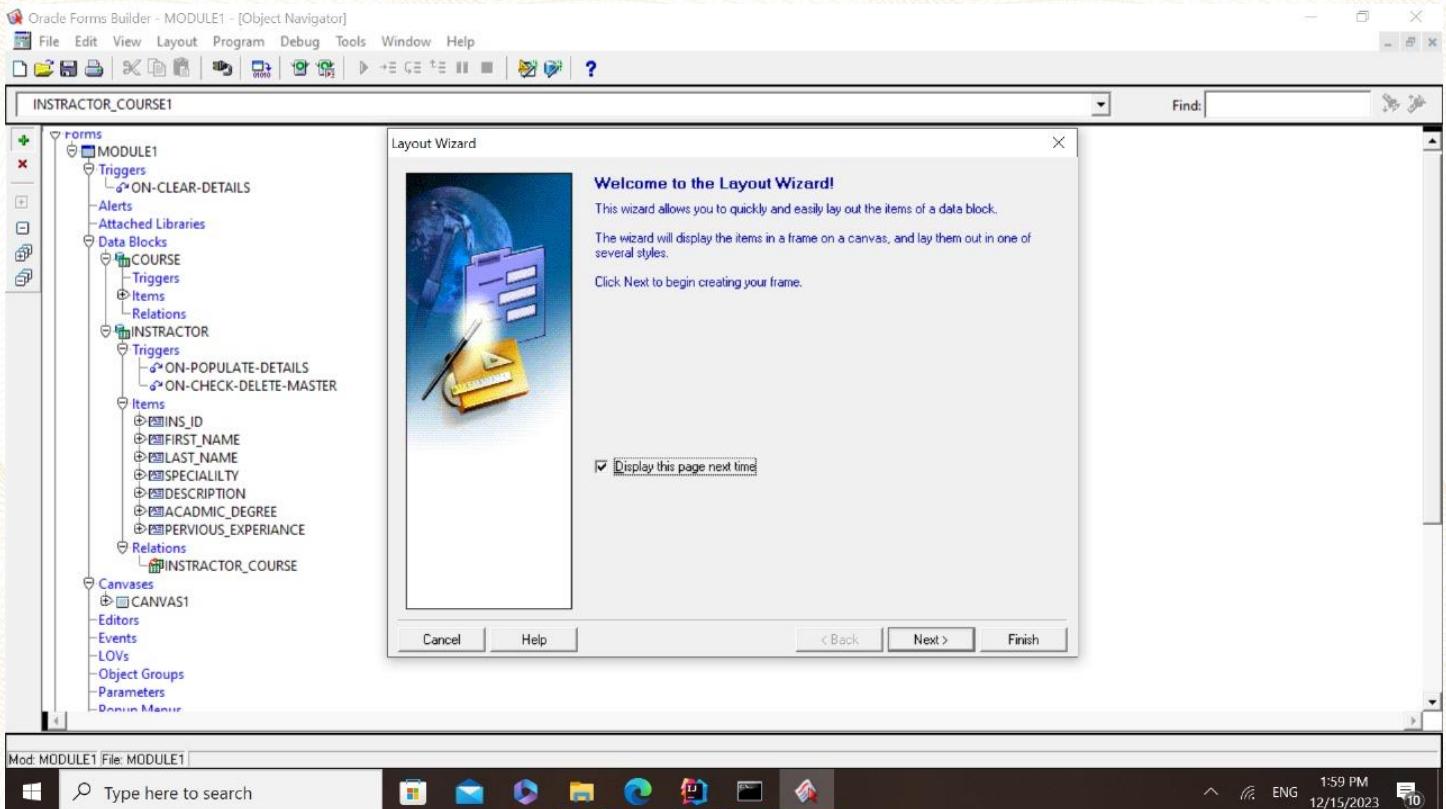


Figure 32 step 27

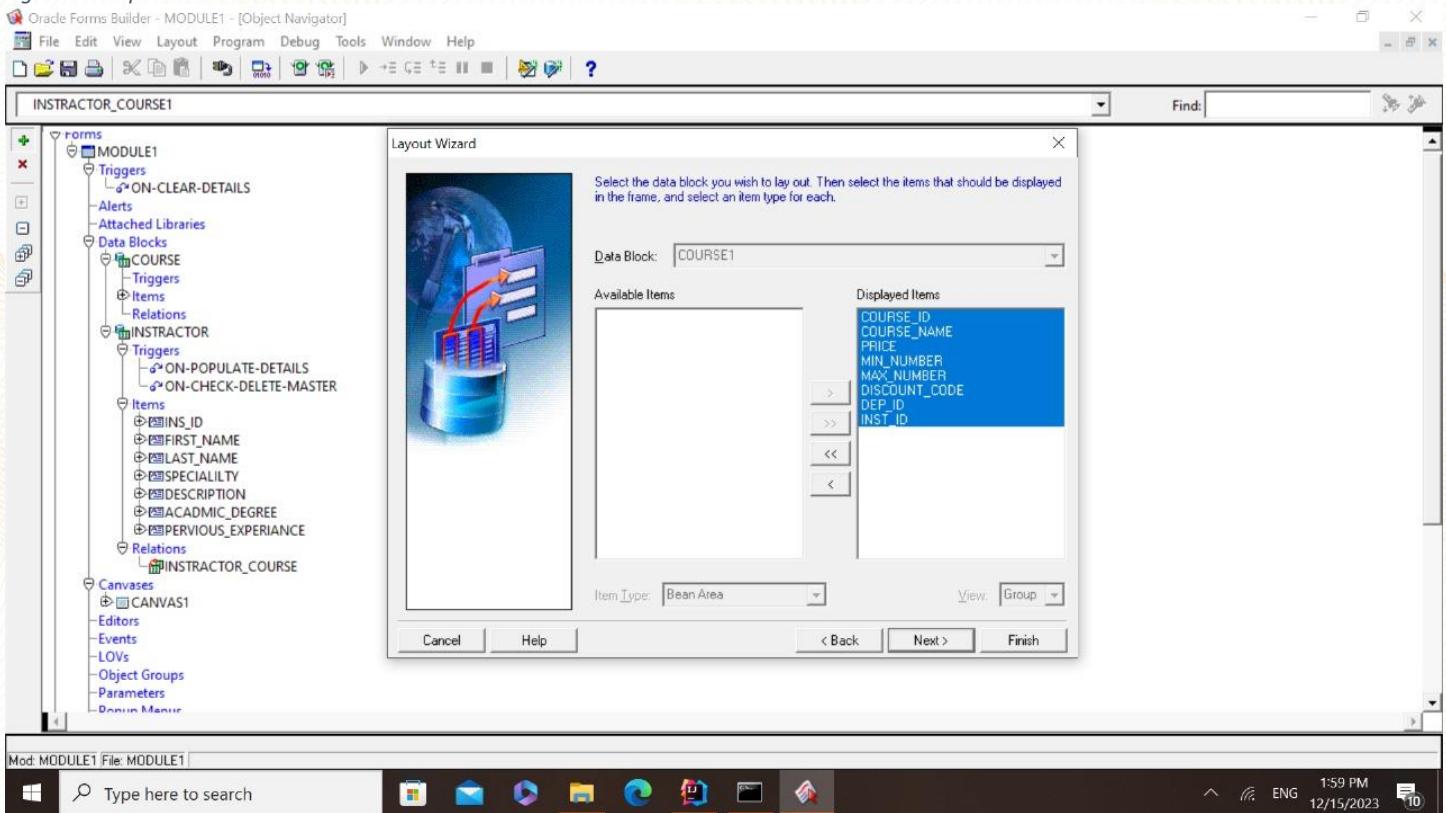


Figure 33 step 28

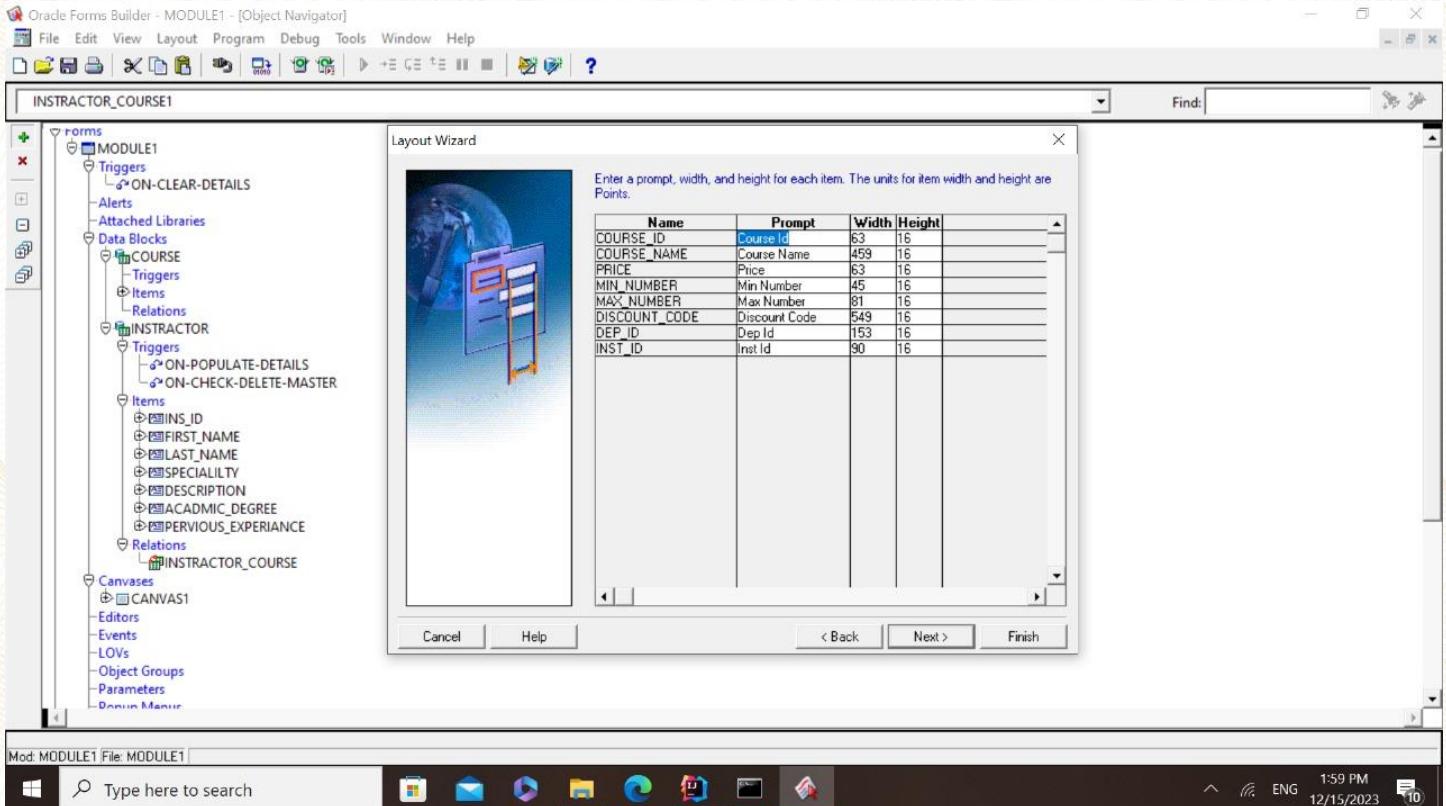


Figure 34 step 29

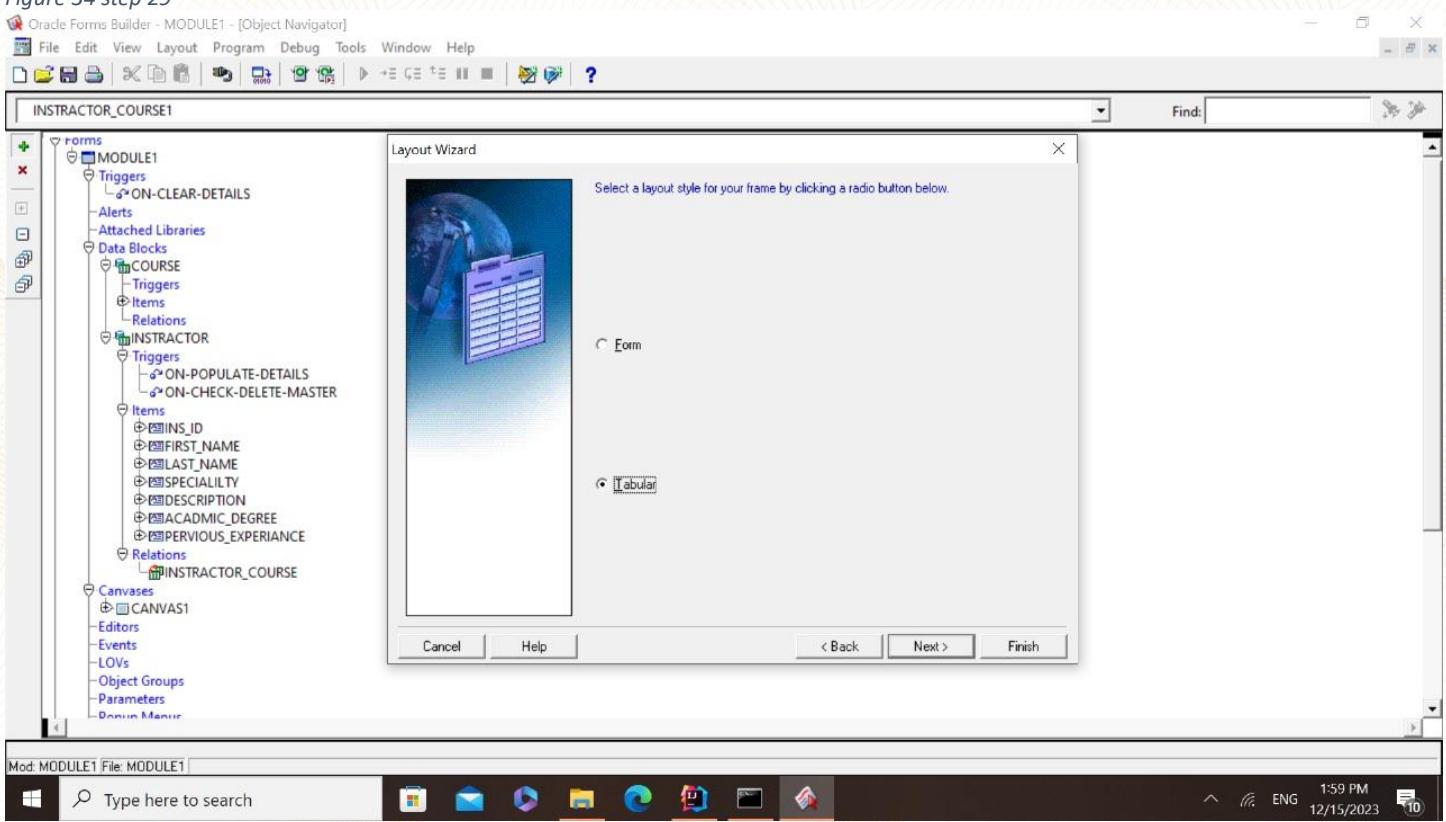


Figure 35 step 30

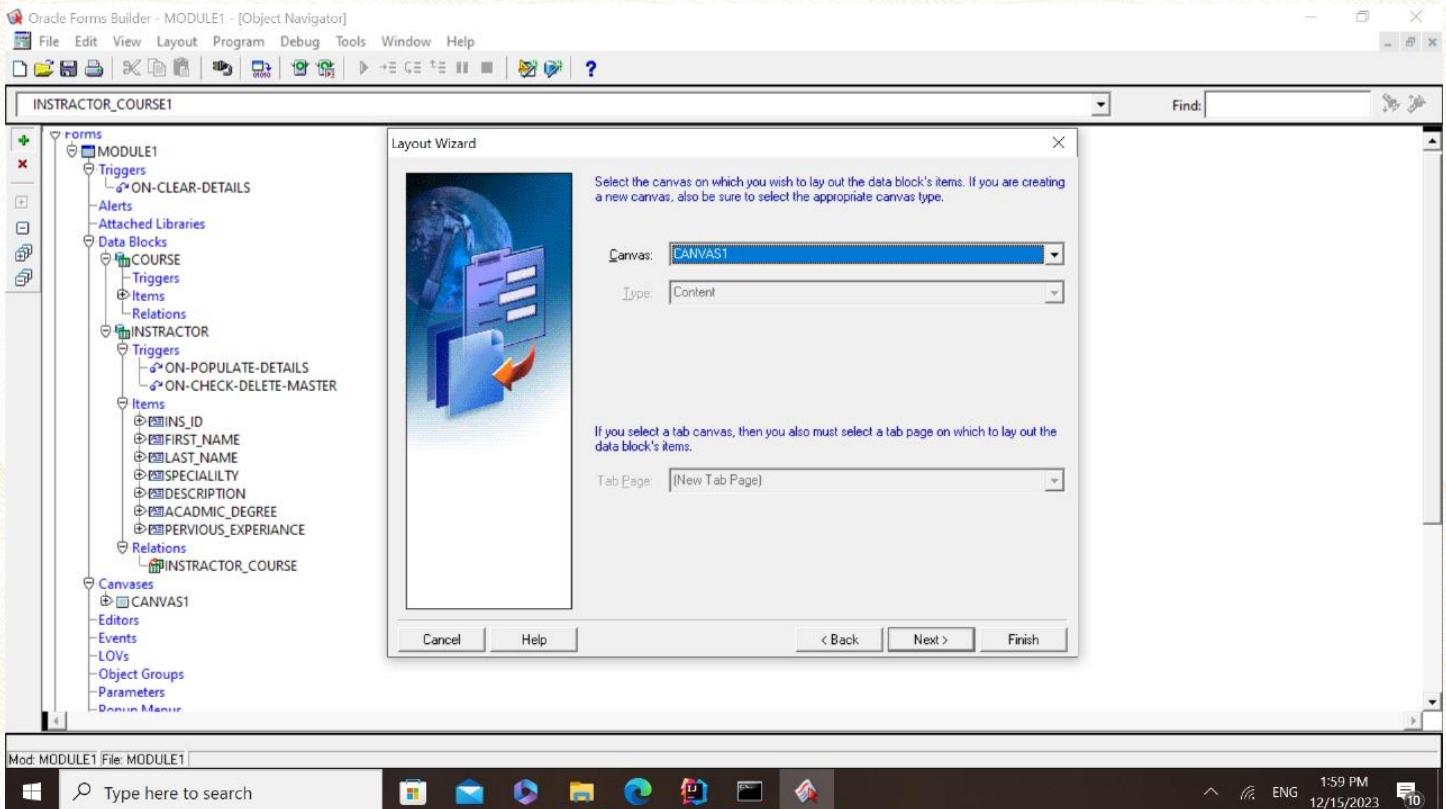


Figure 36 step 31

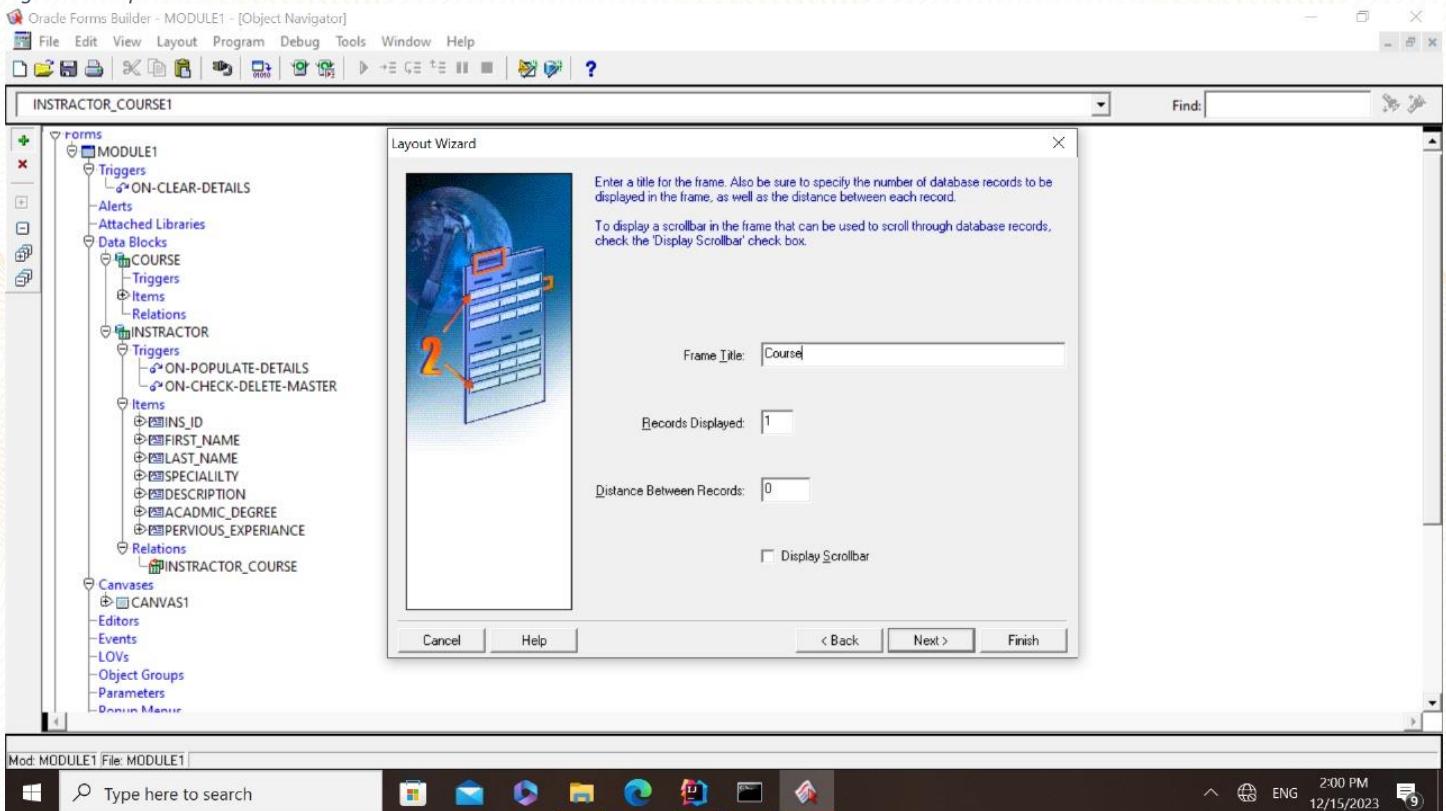


Figure 37 step 32

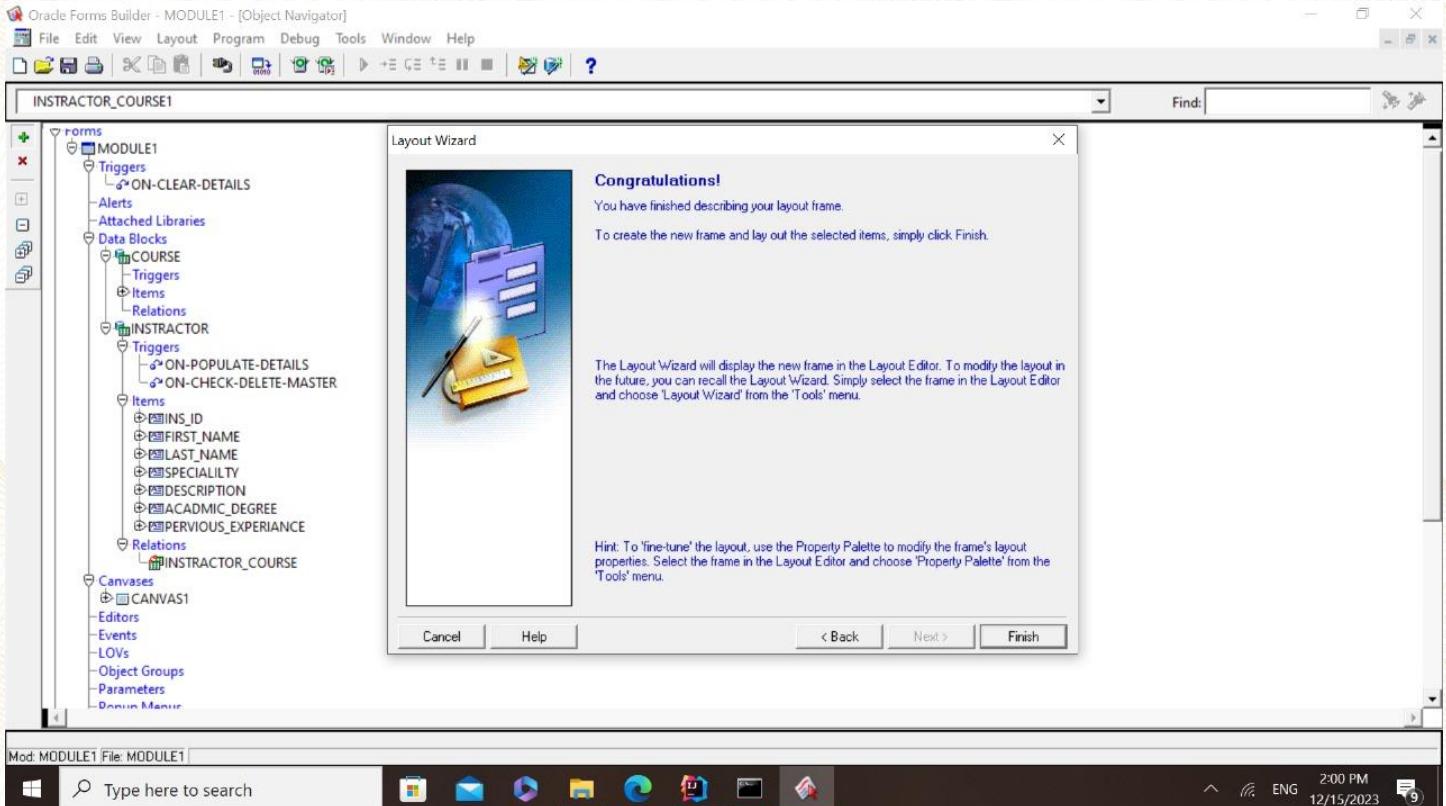


Figure 38 step 33

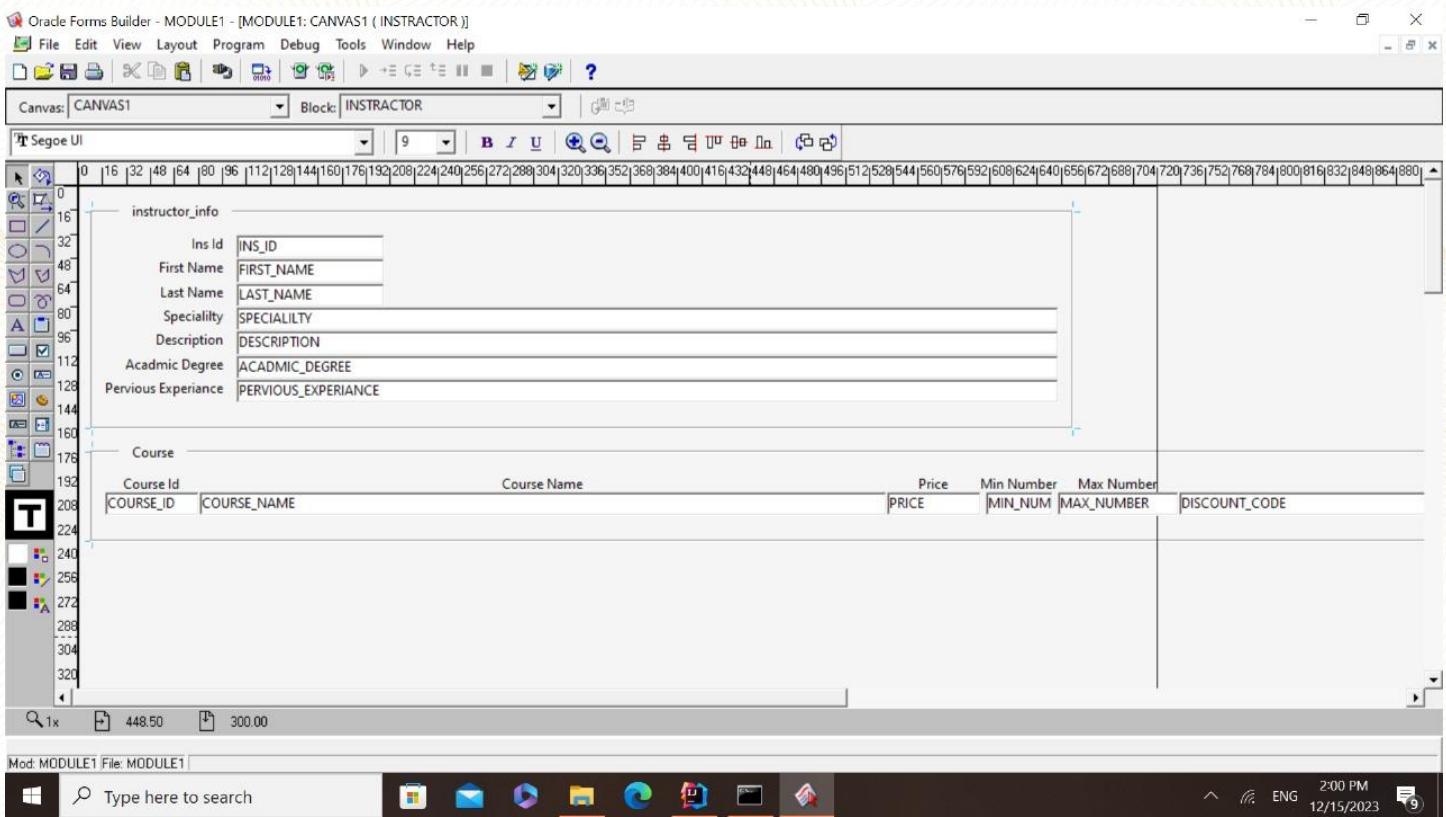


Figure 39 step 34