Chapter 15. GreenDi - User Authorisation and Management

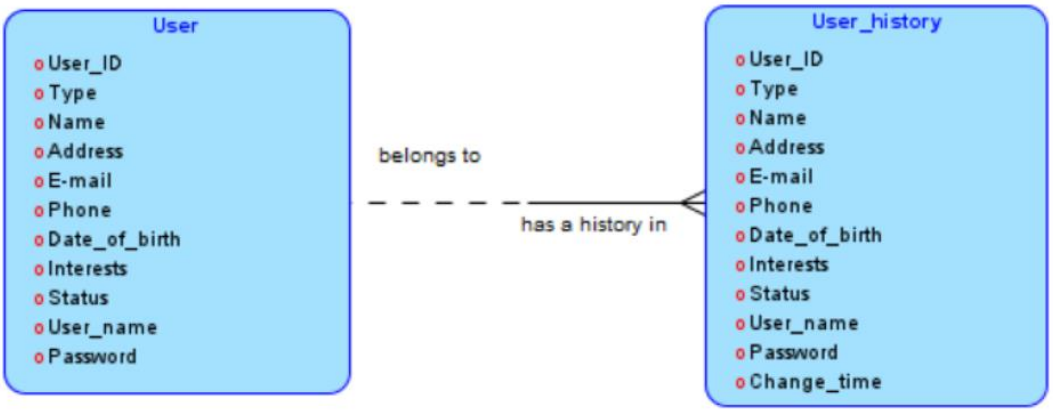


Figure 15.2: Logical data model.

Quick SQL

Quick SQL reduces the time and effort required to create SQL tables, triggers, and index structures. It is not designed to be a replacement for data modeling. Quick SQL is simply a quick way to develop a script for simple tables and views. Once the SQL is generated it can be tweaked and expanded upon. Quick SQL provides a quick way to generate the SQL required to create a relational data model from an indented text document (1).

Accessing Quick SQL

To access the Quick SQL page:

On the Workspace home page, click the SQL Workshop icon.

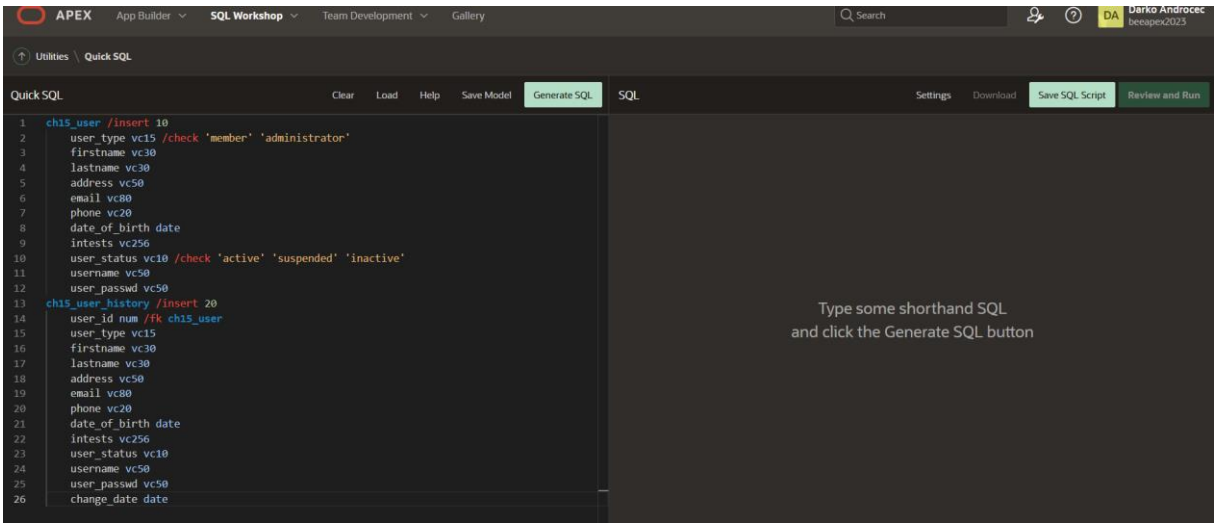
Click Utilities.

Click Quick SQL.

The Quick SQL page appears.

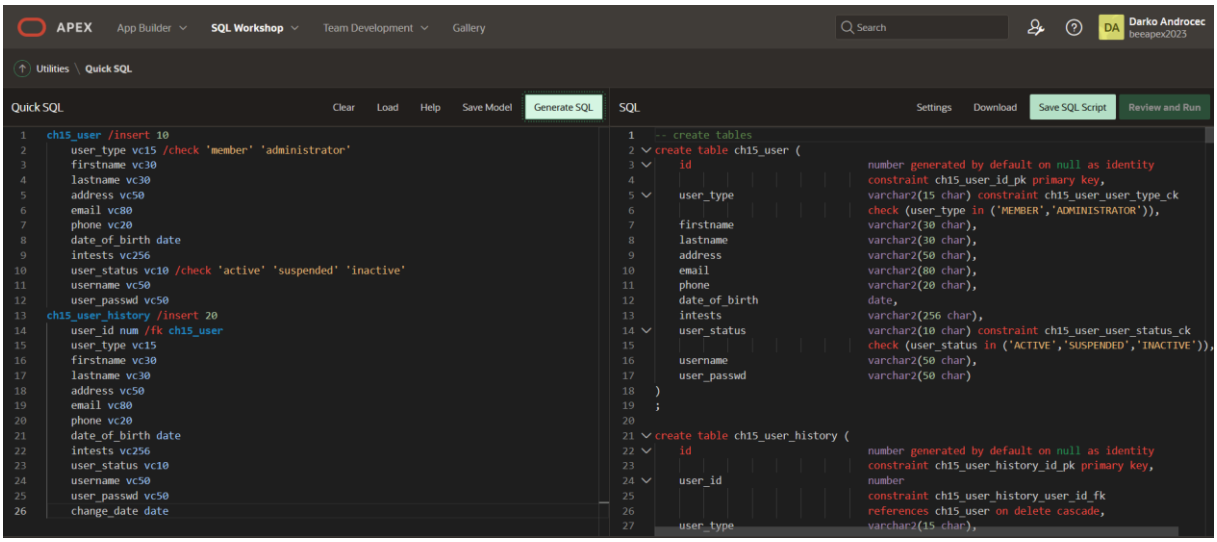
```
ch15_user /insert 10
    user_type vc15 /check 'member' 'administrator'
    firstname vc30
    lastname vc30
    address vc50
    email vc80
```

```
    phone vc20
    date_of_birth date
    intests vc256
    user_status vc10 /check 'active' 'suspended' 'inactive'
    username vc50
    user_passwd vc50
ch15_user_history /insert 20
    user_id num /fk ch15_user
    user_type vc15
    firstname vc30
    lastname vc30
    address vc50
    email vc80
    phone vc20
    date_of_birth date
    intests vc256
    user_status vc10
    username vc50
    user_passwd vc50
    change_date date
```



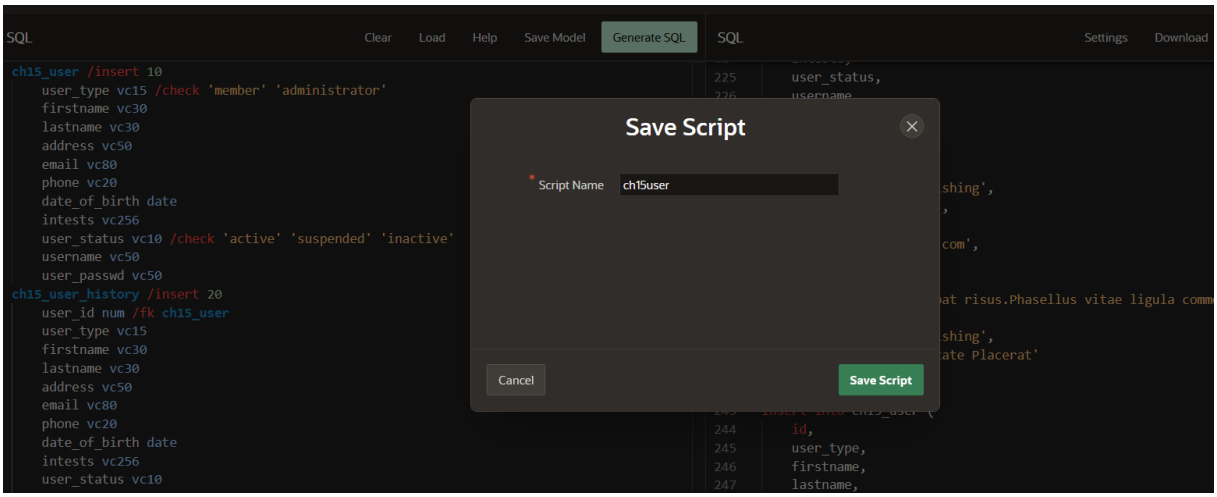
Click Generate SQL.

Displays the generated SQL in Oracle SQL Output pane.

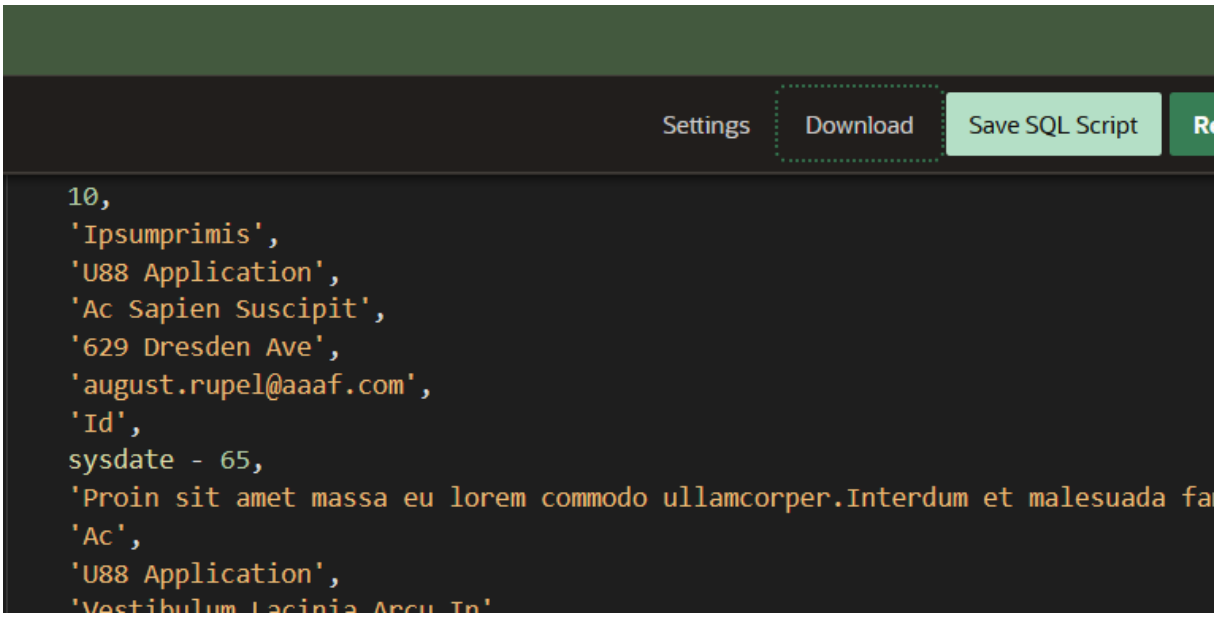


Click Save Script.

The script is saved under SQL Scripts.



Click on Download to locally download the script.



Creating an Application from a Generated SQL Script

When you save a script it saves it to SQL Scripts and you can directly run the Create Application Wizard from SQL Scripts page.

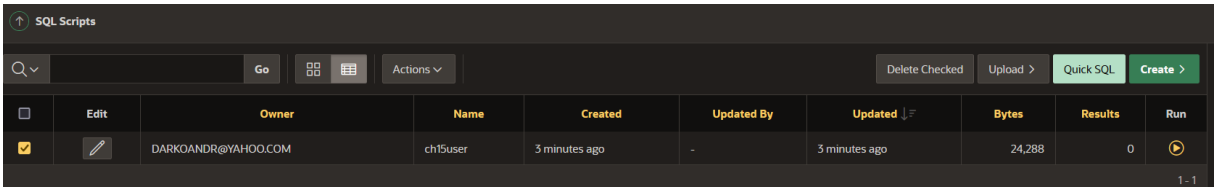
To create an application from script:

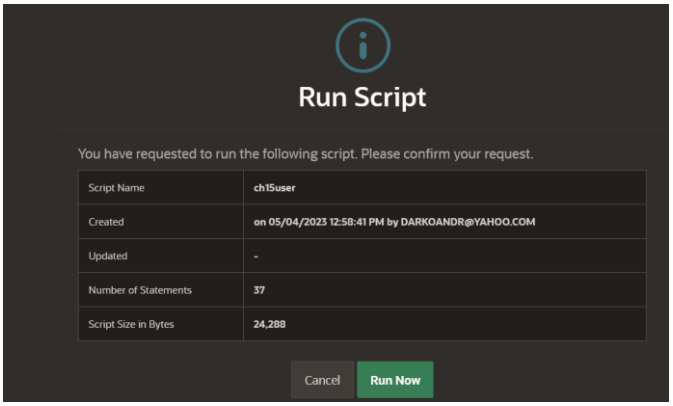
On the Workspace home page, click the SQL Workshop icon.

Click SQL Scripts.

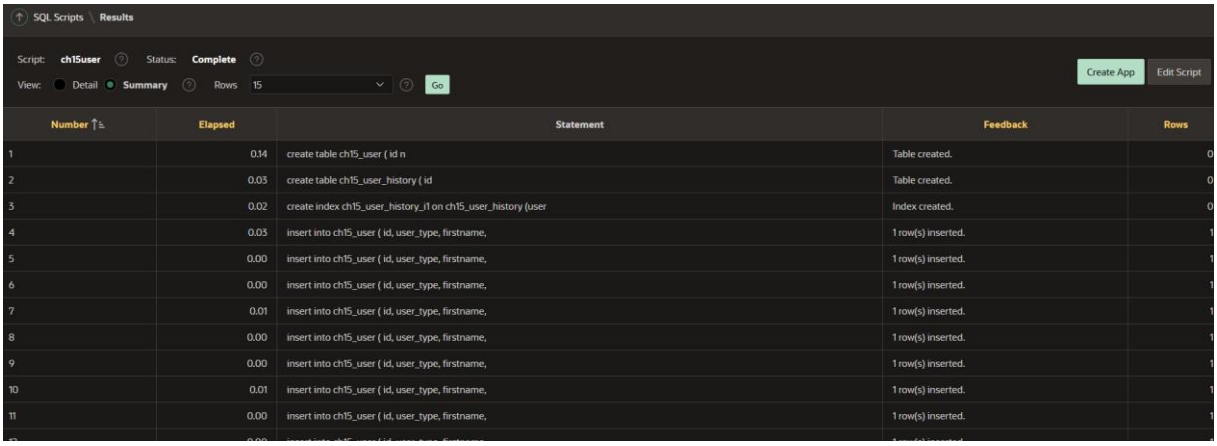
The SQL Script page appears.

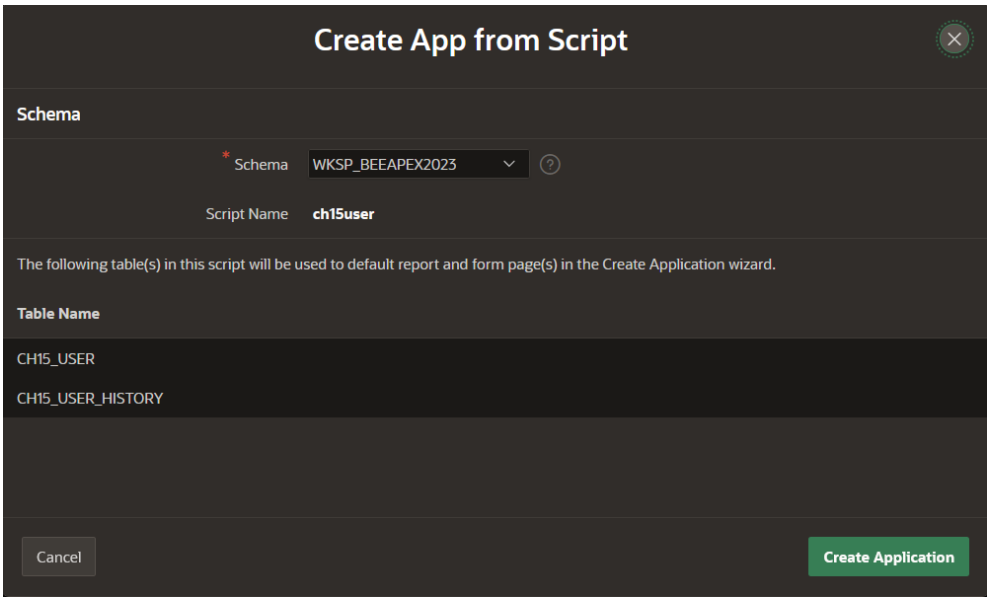
Locate the script and click Run.

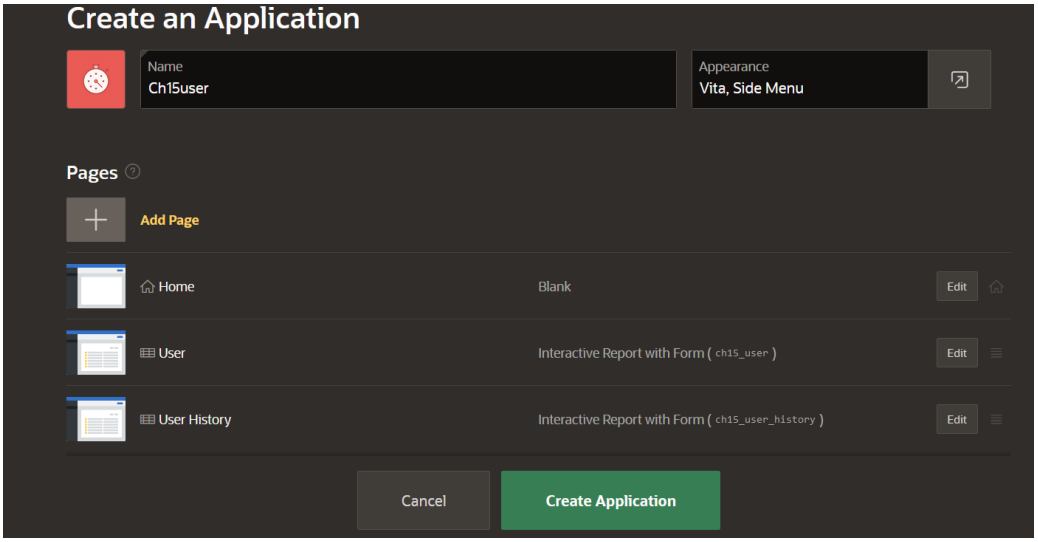


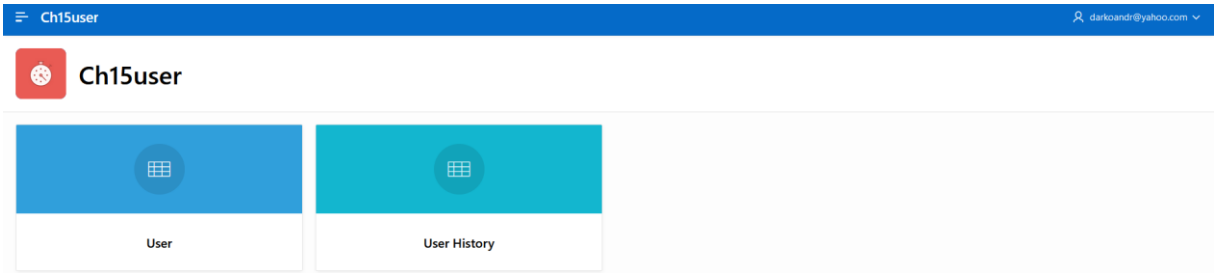


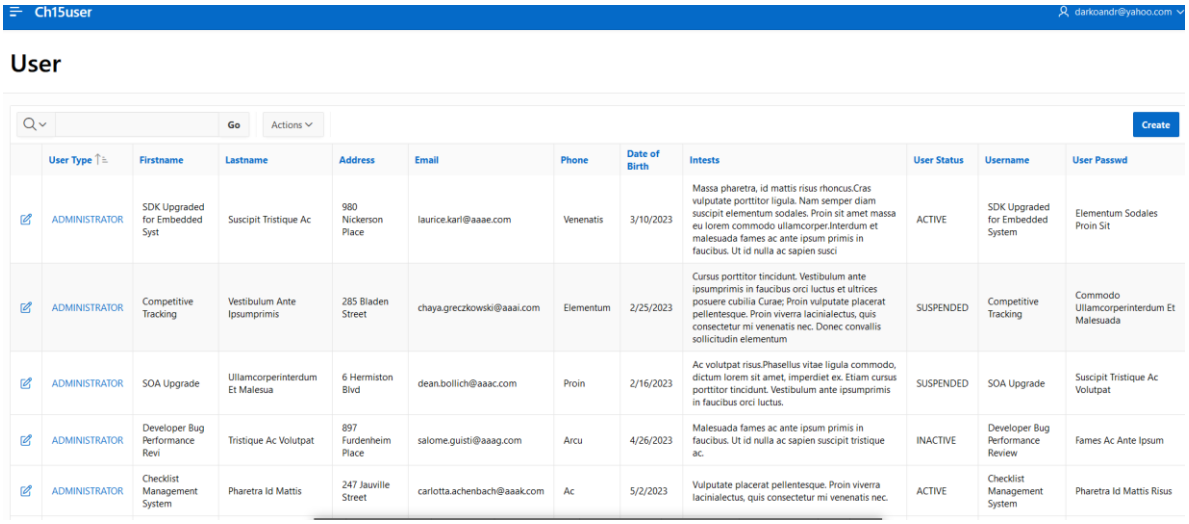
Create App:




Create App from Script
Schema
Schema
WKSP_BEEAPEX2023
Script Name
ch15user
The following table(s) in this script will be used to default report and form page(s) in the Create Application wizard.
Table Name
CH15_USER
CH15_USER_HISTORY
Cancel
Create Application


Create an Application
Name
Ch15user
Appearance
Vita, Side Menu
Pages
Add Page
Home
Blank
Edit
User
Interactive Report with Form (ch15_user)
Edit
User History
Interactive Report with Form (ch15_user_history)
Edit
Cancel
Create Application

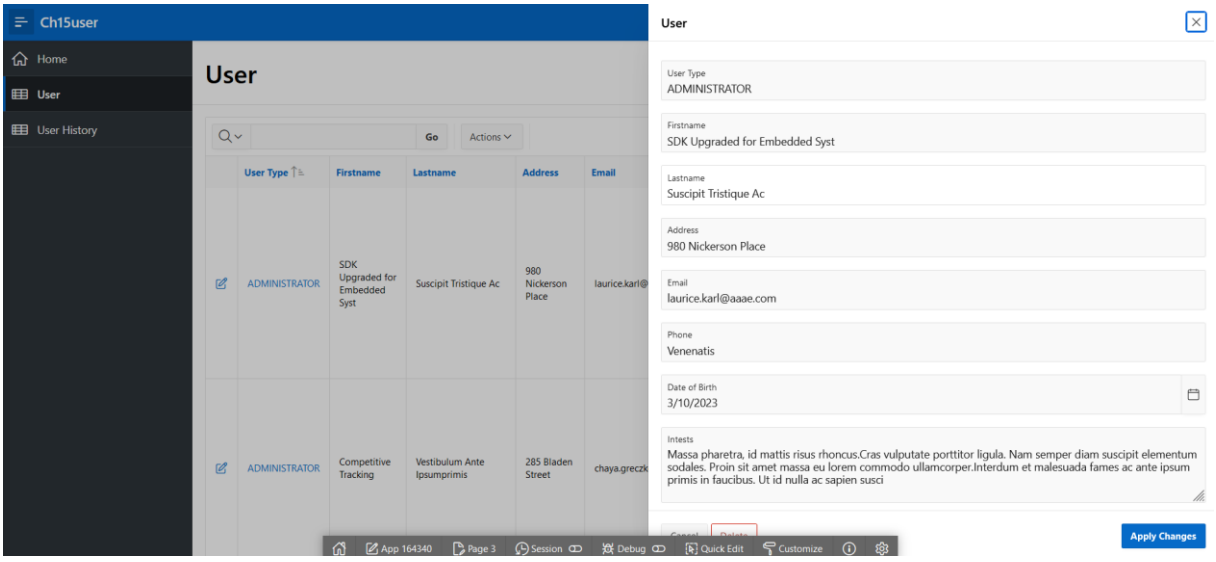

Ch15user
darkoandr@yahoo.com
Ch15user
User
User History



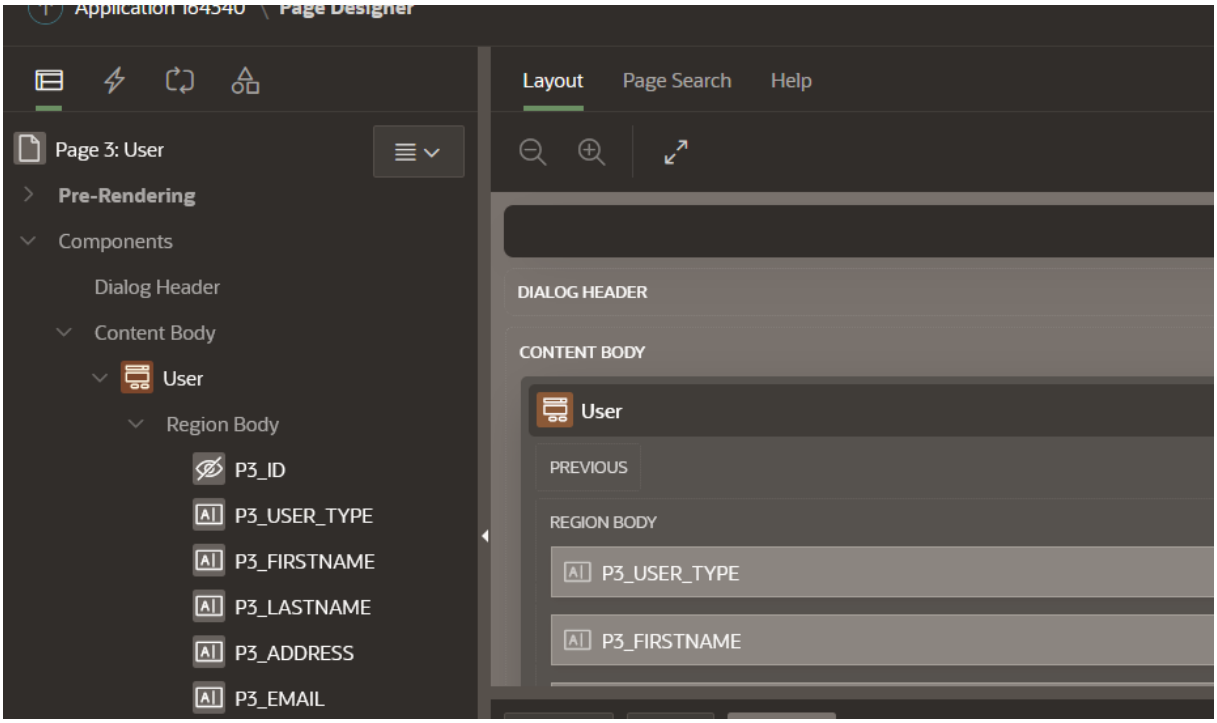
Insert data into user history

From the use case description: Every change of any user data is recorded in the form of a log. The administrator can review the change history of each user.

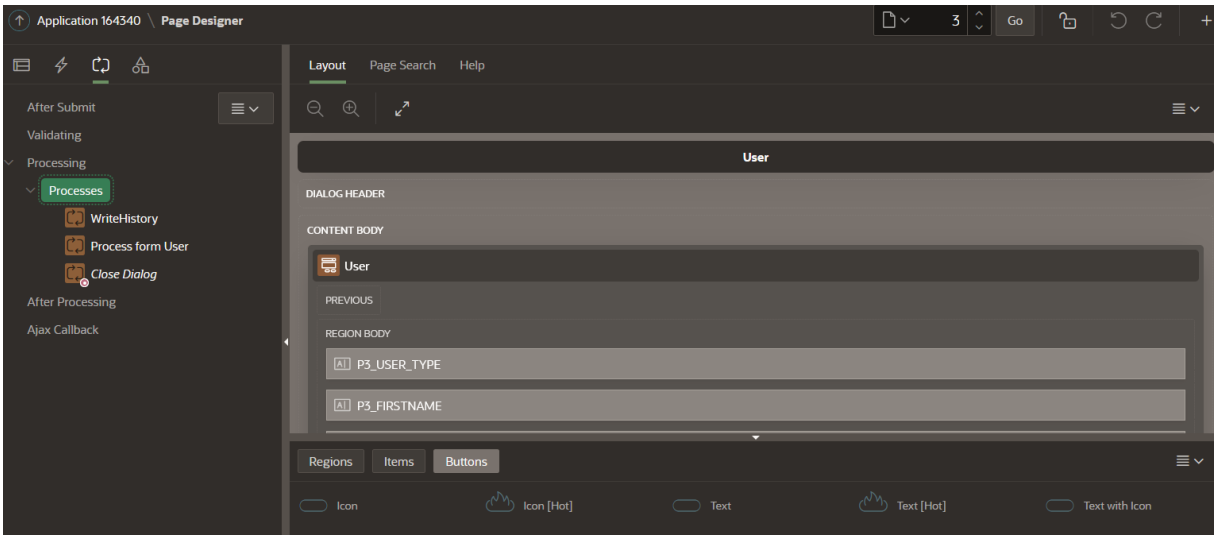
- Create PL-SQL before user update to save data into user_history table



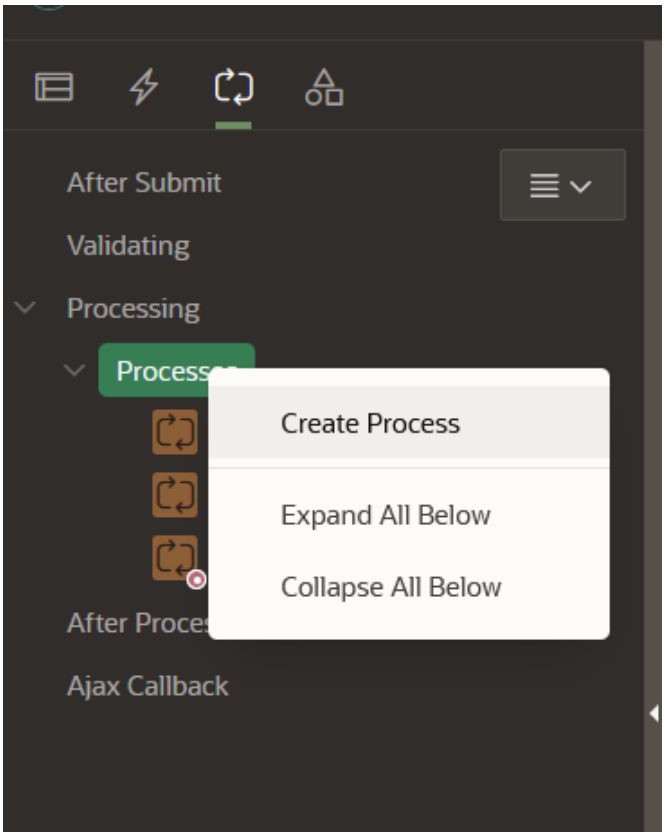
Edit Form (Update) Page



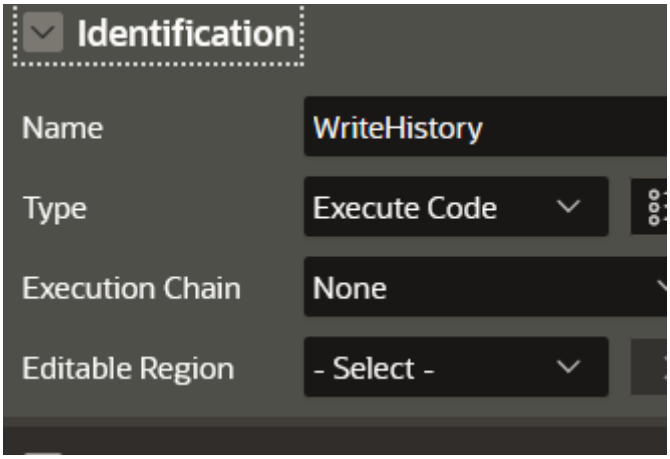
Click on the third icon left – Processes



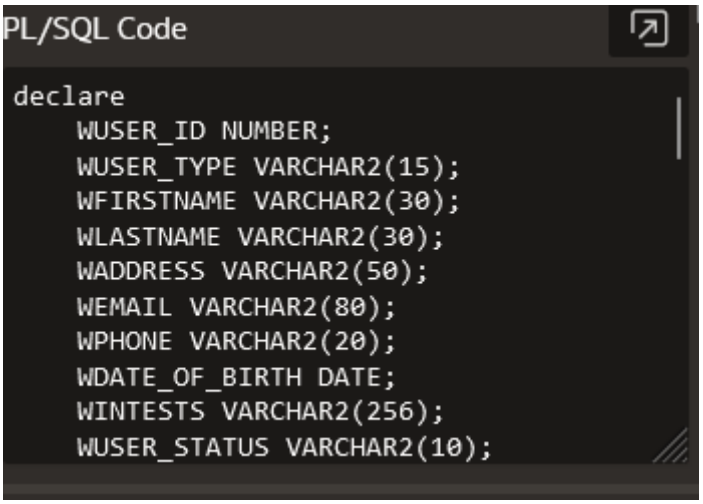
Add new Process before all existing ones – Processes – right mouse click – Create Process



Name of the new process: *WriteHistory*



In the section PL-SQL code:



Write the following PL-SQL code:

```
declare
    WUSER_ID NUMBER;
    WUSER_TYPE VARCHAR2(15);
    WFIRSTNAME VARCHAR2(30);
    WLASTNAME VARCHAR2(30);
    WADDRESS VARCHAR2(50);
    WEMAIL VARCHAR2(80);
    WPHONE VARCHAR2(20);
    WDATE_OF_BIRTH DATE;
    WINTESTS VARCHAR2(256);
    WUSER_STATUS VARCHAR2(10);
    WUSERNAME VARCHAR2(50);
    WUSER_PASSWD VARCHAR2(50);
    WCHANGE_DATE DATE;


begin
    WUSER_ID:= :P3_ID;

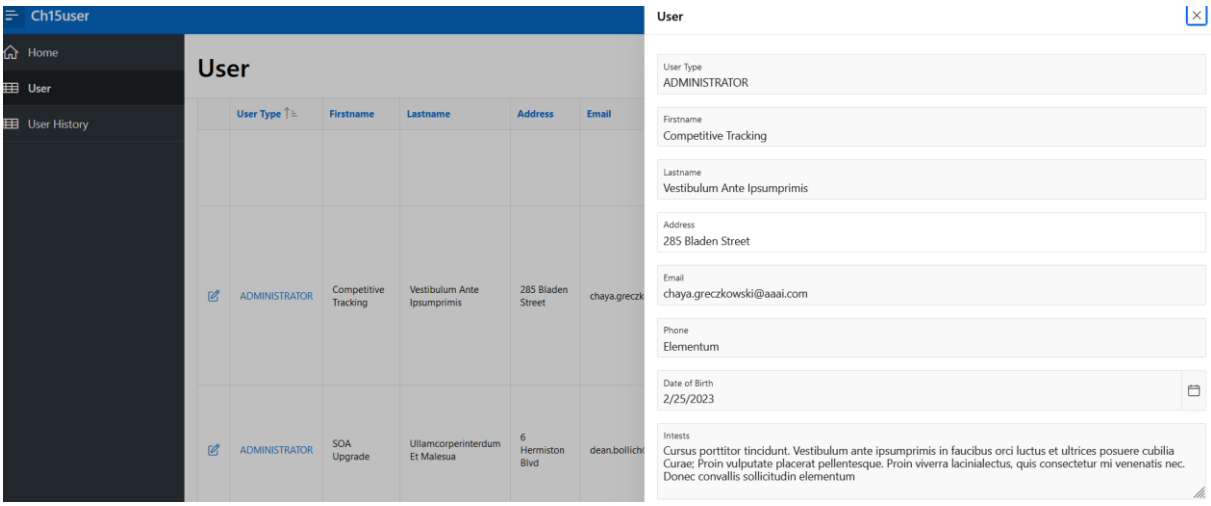

    select ID, USER_TYPE, FIRSTNAME, LASTNAME, ADDRESS, EMAIL,
PHONE,
            DATE_OF_BIRTH, INTESTS, USER_STATUS, USERNAME,
USER_PASSWD
    into WUSER_ID, WUSER_TYPE, WFIRSTNAME, WLASTNAME, WADDRESS,
WEMAIL, WPHONE,
```

```
            WDATE_OF_BIRTH, WINTESTS, WUSER_STATUS, WUSERNAME,
WUSER_PASSWD
    from CH15_USER
    WHERE ID = WUSER_ID;

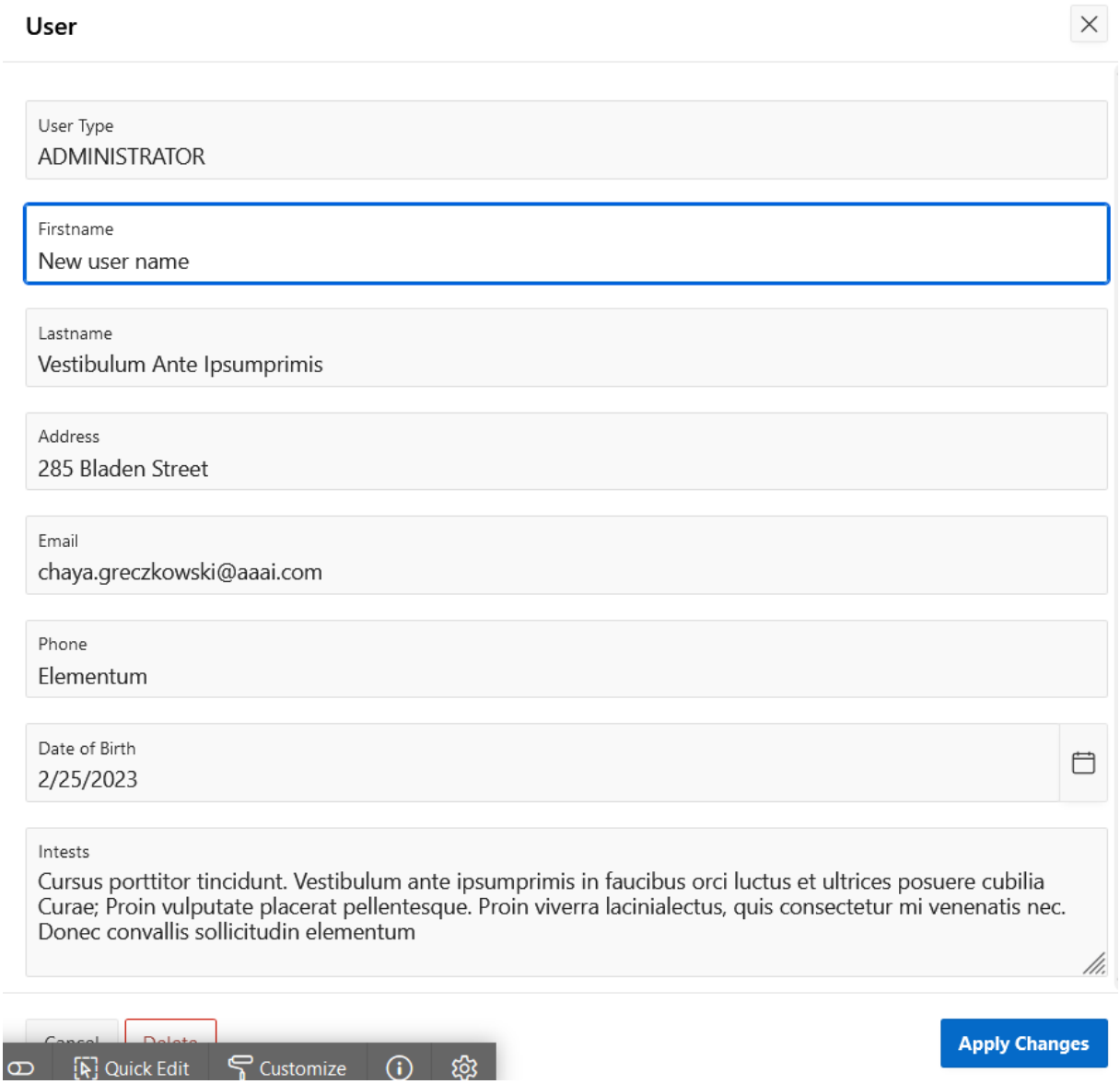


    insert into CH15_USER_HISTORY ( USER_TYPE, FIRSTNAME, LASTNAME,
ADDRESS, EMAIL, PHONE,
            DATE_OF_BIRTH, INTESTS, USER_STATUS, USERNAME,
USER_PASSWD, CHANGE_DATE)
            values (WUSER_TYPE, WFIRSTNAME, WLASTNAME, WADDRESS,
WEMAIL, WPHONE,
            WDATE_OF_BIRTH, WINTESTS, WUSER_STATUS, WUSERNAME,
WUSER_PASSWD, sysdate());
end;
```

Now before update the old values of the user are saved into ch15_user_history table.



Change of the Firstname:



Apply Changes

The old values are saved into user history table:

	ADMINISTRATOR	Competitive Tracking	Vestibulum Ante Ipsumprimis	285 Bladen Street	chaya.greczkowski@aaai.com	Elementum	2/25/2023	Cursus porttitor tincidunt. Vestibulum ante ipsumprimis in faucibus orci luctus et ultrices posuere cubilia Curae; Proin vulputate placerat pellentesque. Proin viverra lacinialectus, quis consectetur mi venenatis nec. Donec convallis sollicitudin elementum	SUSPENDED	Competitive Tracking	Commodo Ullamcorperinterc Et Malesuada

Literature

1. Oracle, SQL Workshop Guide - 4.3 Using Quick SQL, https://docs.oracle.com/en/database/oracle/application-express/19.1/aeutl/using-quick-SQL.html#GUID-21EE36C2-F814-48C0-90EA-7D464E9014FD, Accessed 4.5.2023.