

# Practice: Sharing and Creating Notebooks Using Oracle Machine Learning Templates

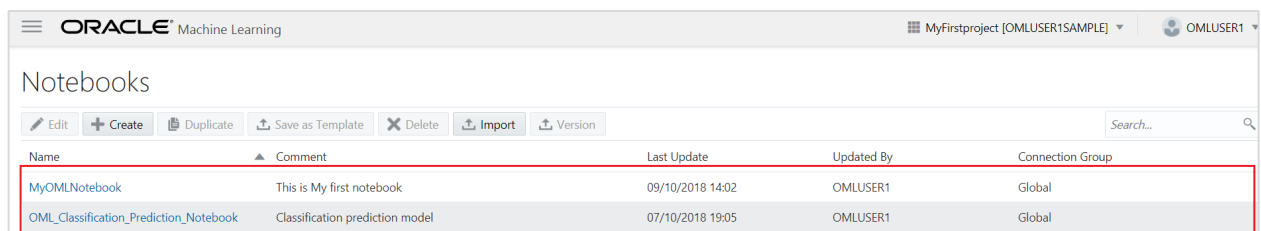
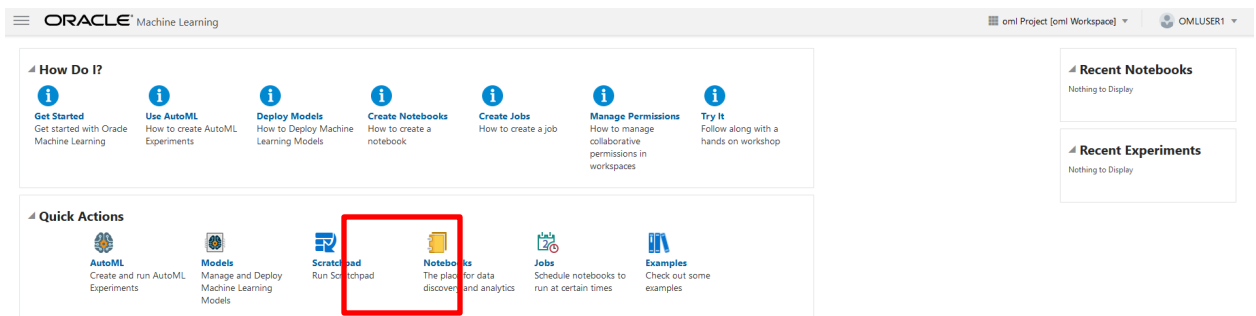
Get your free cloud account: click [here](#).

## Overview

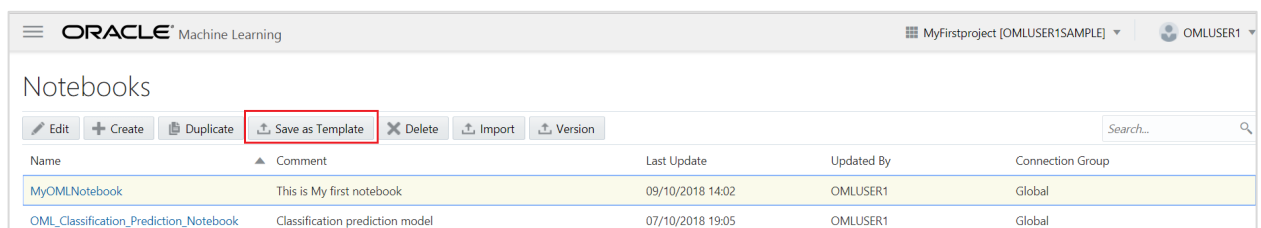
In this practice, you share a notebook using Oracle Machine Learning templates and create notebooks from Machine Learning templates.

## Tasks

1. Log into your [Oracle Cloud Free Tier Account](#)
2. On the Oracle Machine Learning home page, click **Notebooks**. It displays all the notebooks, as shown below.



3. On the Notebooks page, select the notebook you want to save as a template and click **Save as Template**. The Save as Template dialog box opens.

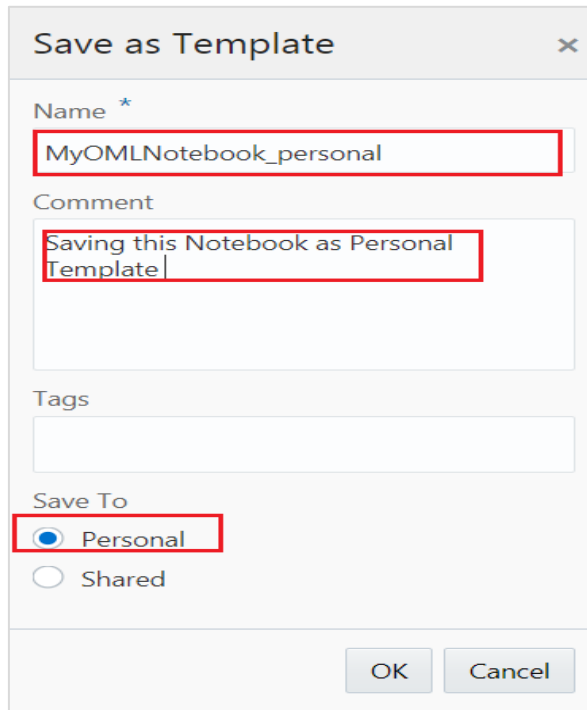


- a. In the Name field, enter a name for the notebook template.

- b. In the Comments field, enter comments, if any. In the Save To field, select **Personal** if you want to save this template to Personal Templates, as shown below.

Name: MyOMLNotebook\_personal

Comments: Saving this Notebook as Personal Template



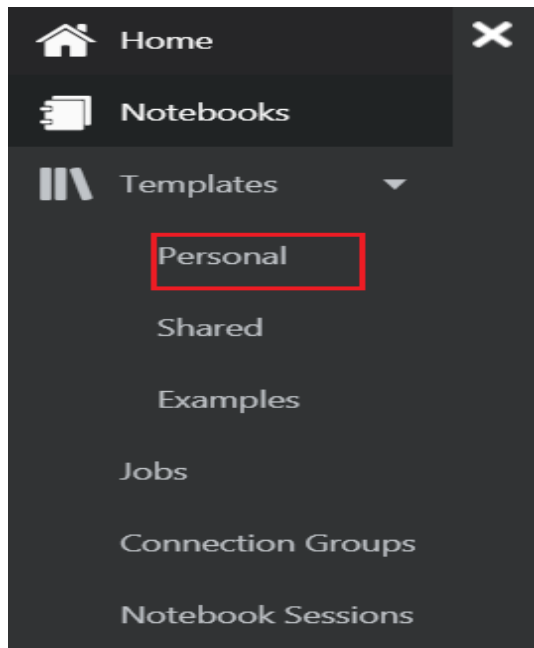
The image shows a 'Save as Template' dialog box with the following fields and options:

- Name \***: MyOMLNotebook\_personal
- Comment**: Saving this Notebook as Personal Template
- Tags**: (empty text box)
- Save To**:
  - ☒ Personal
  - ☐ Shared
- Buttons**: OK, Cancel

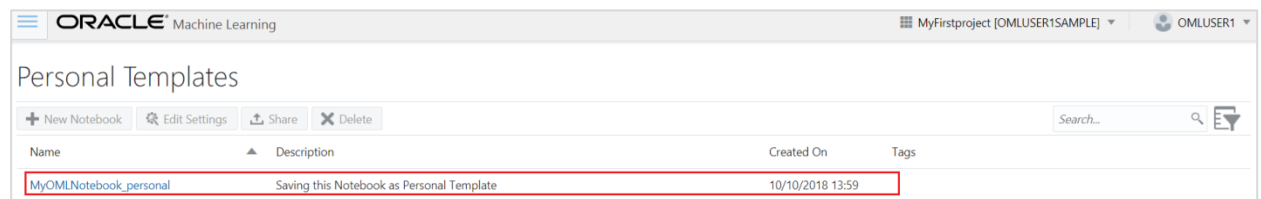
- c. Click **OK**. The notebook will be successfully created in Personal Templates.

Template "MyOMLNotebook\_personal" created in Personal

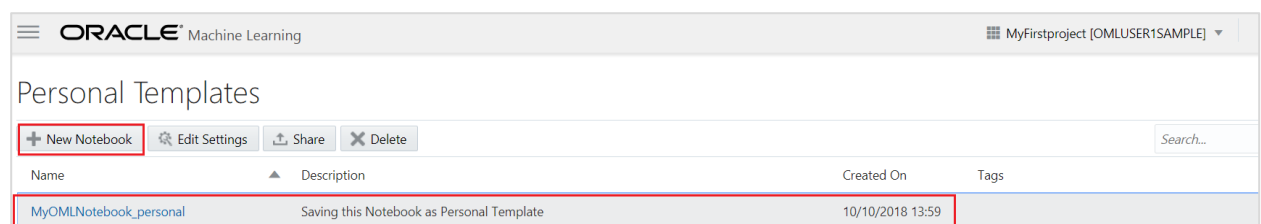
- d. To check the personal template, click **Menu** and then click **Personal** under Templates.



- e. The Personal Templates home page will be displayed as follows:

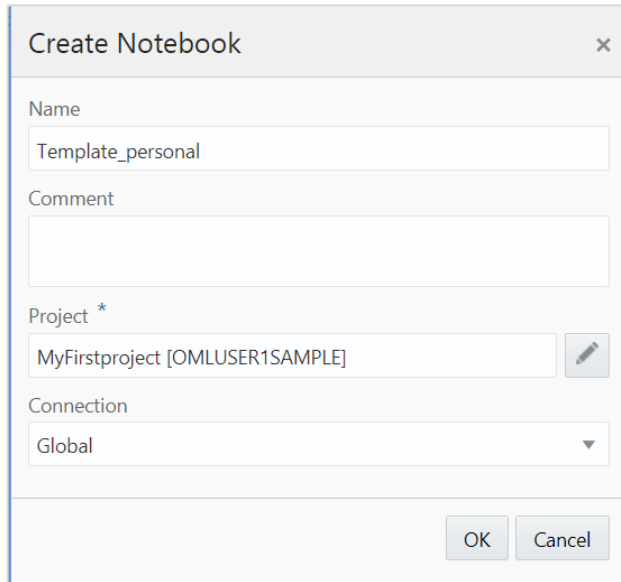


4. To create a notebook from the personal template, follow these steps:
- On the Personal Templates page, select the template based on which you want to create the notebook, and click **New Notebook**.



- In the Name field, provide the name "Template\_personal" for the notebook.
- In the Comments field, enter comments, if any.
- In the Project field, select the project in which you want to save your notebook.
- In the Connection field, the default connection is selected.

- f. Click **OK**.

A dialog box titled "Create Notebook" with a close button (X) in the top right corner. It contains four input fields: "Name" with the text "Template\_personal", "Comment" (empty), "Project" with a dropdown menu showing "MyFirstproject [OMLUSER1SAMPLE]" and a pencil icon, and "Connection" with a dropdown menu showing "Global". At the bottom are "OK" and "Cancel" buttons.

Create Notebook

Name  
Template\_personal

Comment

Project \*  
MyFirstproject [OMLUSER1SAMPLE]

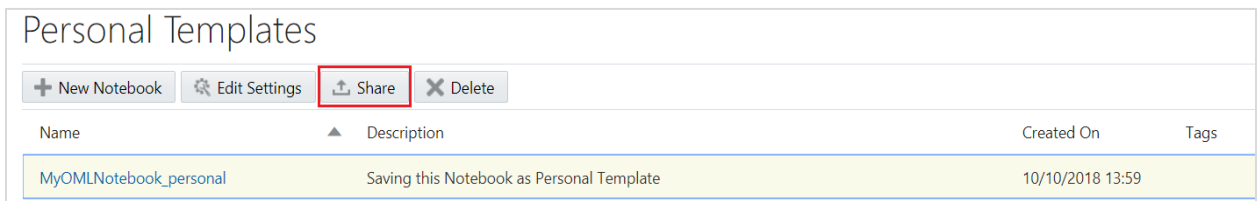
Connection  
Global

OK Cancel

- g. The notebook **Template\_personal** is created successfully in MyFirstproject.

Notebook "Template\_personal" created in project "MyFirstproject".

5. To share templates from Personal Templates, follow these steps:
- a. Select the notebook template in Personal Templates and click **Share**.  
The Save to Shared Templates dialog box opens.

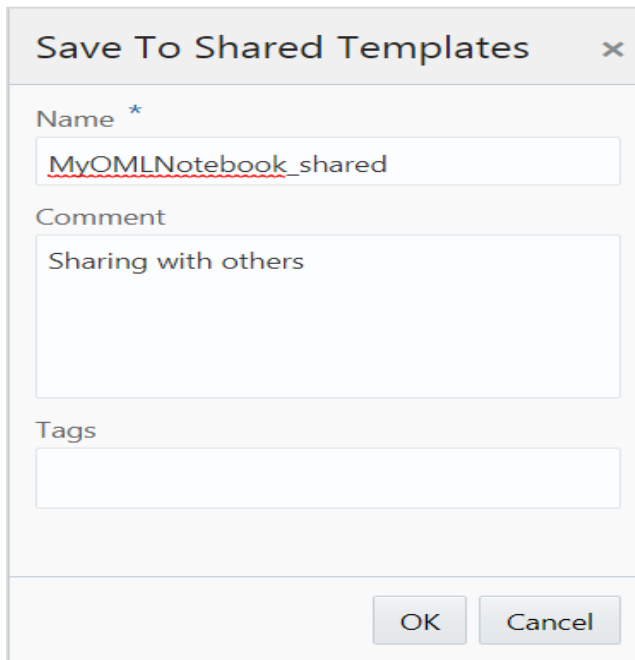
A dialog box titled "Personal Templates" with a toolbar containing "New Notebook", "Edit Settings", "Share" (highlighted with a red box), and "Delete" buttons. Below is a table with columns: Name, Description, Created On, and Tags.

Name	Description	Created On	Tags
MyOMLNotebook_personal	Saving this Notebook as Personal Template	10/10/2018 13:59	

- b. In the Name field, enter a new name for the template.
- c. In the Comments field, provide comments, if any.
- d. In the Tags field, enter tags separated by commas. To enable easy searching, use descriptive tags.
- e. Click **OK**.

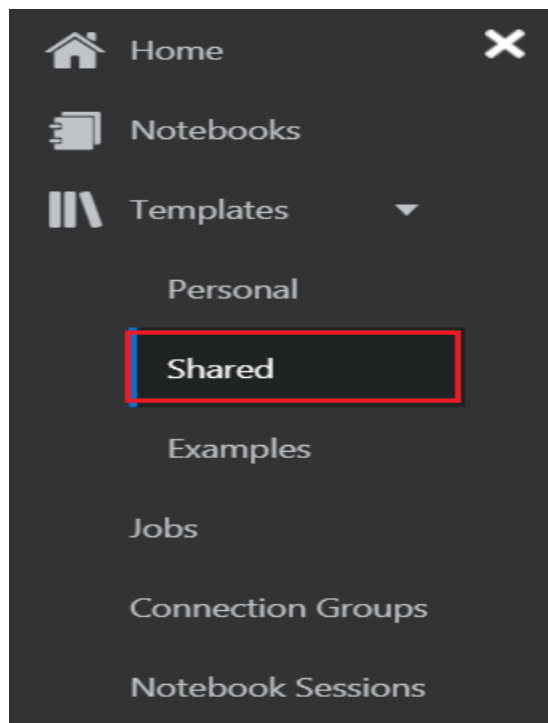
Name: **MYOMLNotebook\_shared**

Comment: Sharing with others

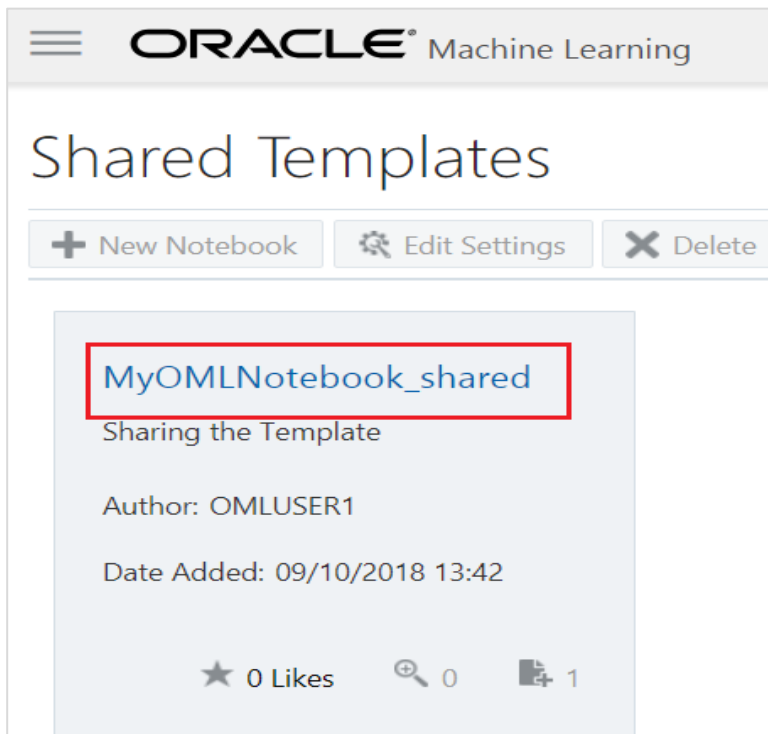


A dialog box titled "Save To Shared Templates" with a close button (X) in the top right corner. It contains three input fields: "Name \*" with the text "MyOMLNotebook\_shared" (underlined in red), "Comment" with the text "Sharing with others", and "Tags" which is empty. At the bottom right are "OK" and "Cancel" buttons.

- f. The MYOMLNotebook\_shared template is successfully shared to Shared Templates.
- g. To check the shared template, click **Menu** and select **Shared** under Templates.



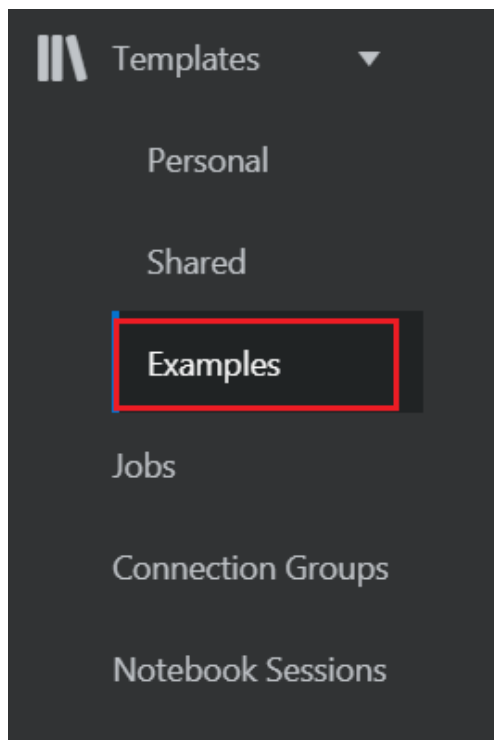
- h. The Shared Templates home page will be displayed. Check the template you have shared.



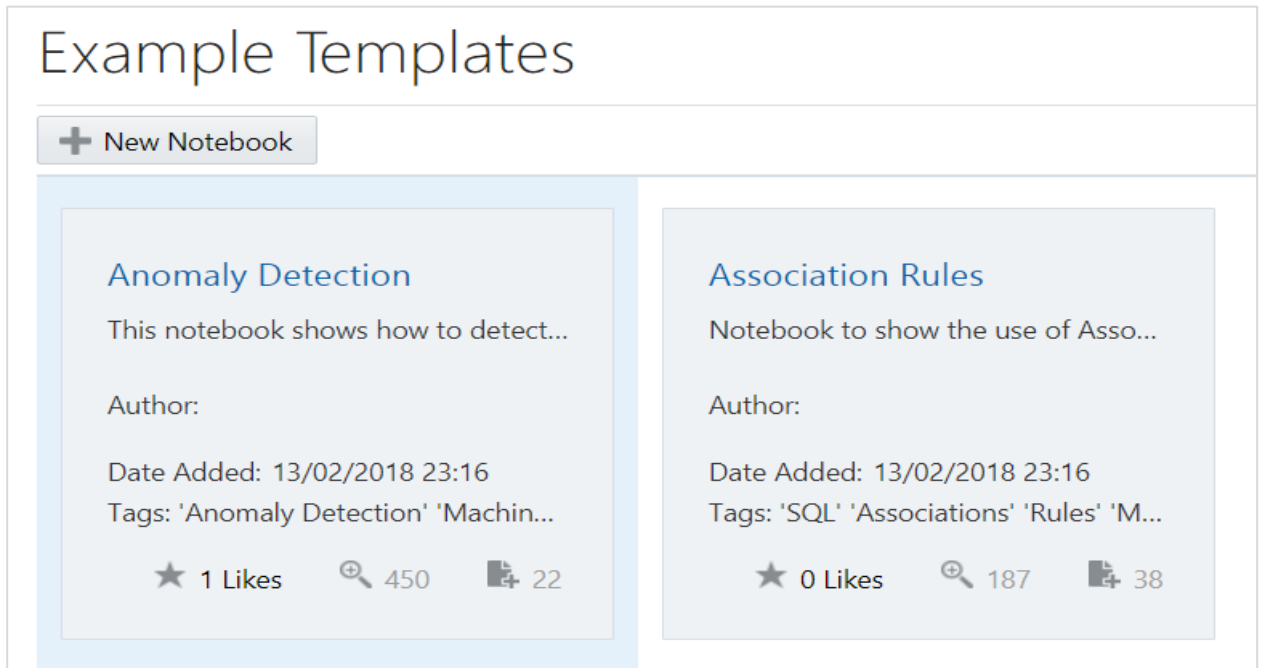
6. Create notebooks from Example Templates

To create a notebook, follow these steps:

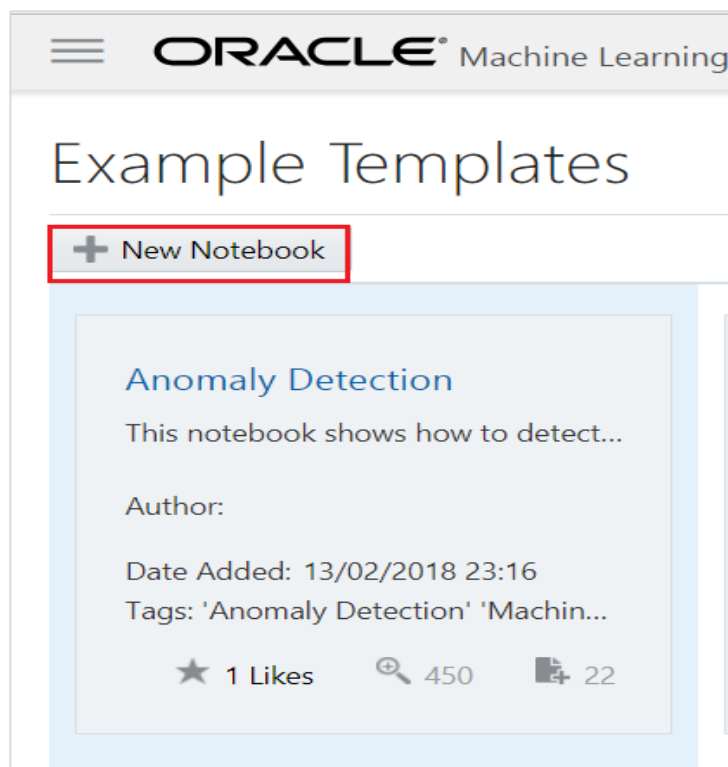
- a. Click **Menu** in the left corner and select **Examples** under Templates, as shown below.



- b. The Example Templates home page will be displayed.



- c. On the Example Templates page, select the template based on which you want to create a notebook.
- d. Click **New Notebook**.



- e. The Create Notebook dialog box opens.



- f. In the Create Notebook window, the name of the selected template appears. In the Name field, you can change the notebook name, as shown below.

**Name:** Anomaly Detection Test

**Comment:** This notebook shows how to detect rare records, customers, or transactions using an unsupervised learning algorithm (1-Class Support Vector Machine). The notebook first builds a 1-Class SVM model and then applies the model to flag unusual or suspicious records. The anomaly detection model can also be applied to score new records. The entire machine learning methodology runs inside Oracle Autonomous Data Warehouse (ADW).

Create Notebook

Name

Anomaly Detection\_Test

Comment

This notebook shows how to detect rare records, customers or transactions using an unsupervised learning algorithm (1-Class Support Vector Machine). The notebook first builds a 1-Class SVM model and then applies the model to flag unusual or suspicious records. The anomaly detection model can also be applied to score new records. The entire machine learning methodology runs inside Oracle Autonomous Data Warehouse (ADW).

Project \*

MyFirstproject [OMLUSER1SAMPLE]

Connection

Global

OK Cancel

- g. Click **OK**. The Anomaly Detection\_Test notebook is created successfully in MyFirstproject.
- h. Click **Notebooks** from the Menu and open the **Anomaly Detection\_Test** notebook as shown below.

Notebooks

Edit Create Duplicate Save as Template Delete Import Version Search...

Name	Comment	Last Update	Updated By	Connection Group
Anomaly Detection_Test	This notebook shows how to detect rare records, customers or trans...	10/10/2018 14:32	OMLUSER1	Global



ORACLE

Machine Learning

MyFirstproject [OMLUSER1SAMPLE] OMLUSER1

Back

Connected

Anomaly Detection\_Test

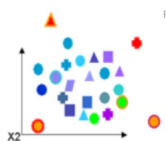
Anomaly Detection to Detect Suspicious or Rare Occurrences

This notebook shows how to detect rare records, customers or transactions using an unsupervised learning algorithm (1-Class Support Vector Machine). The notebook first builds a 1-Class SVM model and then applies the model to flag unusual or suspicious records. The anomaly detection model can also be applied to “score” new records. The entire machine learning methodology runs inside the Oracle Autonomous Data Warehouse Cloud (ADWC).

By Charlie Berger

Took 0 sec. Last updated by CBERGER at February 06 2018, 7:24:19 PM. (outdated)

FINISHED



FINISHED Took 1 sec. Last updated by CBERGER at February 06 2018, 6:19:16 PM. (outdated)

For more information, check the Oracle ADWC Documentation <https://docs.oracle.com/en/cloud/paas/autonomous-data-warehouse-cloud/index.html>, Oracle Machine Learning folder on Oracle on Github <https://github.com/oracle/advanced-analytics> <http://www.oracle.com/technetwork/database/options/advanced-analytics/overview/index.html> and Oracle Machine Learning on Oracle Technology Network and Introducing Oracle Machine Learning blog post

Took 0 sec. Last updated by CBERGER at February 06 2018, 7:55:06 PM. (outdated)

Clean up and drop any table if previously exists for notebook reproducibility

```
%script
BEGIN
    EXECUTE IMMEDIATE 'DROP Table SUPPLEMENTARY_DEMOGRAPHICS2';
EXCEPTION
    WHEN OTHERS THEN NULL;
END;
```

FINISHED

Clean up and drop any table if previously exists for notebook reproducibility

```
%script
BEGIN
    EXECUTE IMMEDIATE 'DROP Table SUPPLEMENTARY_DEMOGRAPHICS2';
EXCEPTION
    WHEN OTHERS THEN NULL;
END;
```

FINISHED

PL/SQL procedure successfully completed.

Took 0 sec. Last updated by CBERGER at February 07 2018, 3:42:56 AM.

Create SUPPLEMENTARY\_DEMOGRAPHICS2 table that remove COMMENTS unstructured data for simplicity.

```
%sql
CREATE Table SUPPLEMENTARY_DEMOGRAPHICS2
AS (SELECT AFFINITY_CARD, BOOKKEEPING_APPLICATION, BULK_PACK_DISKETTES, CUST_ID, EDUCATION, FLAT_PANEL_MONITOR, HOME_THEATER_PACKAGE, HOUSEHOLD_SIZE, OCCUPATION, OS_DOC_SET_KANJI, PRINTER_SUPPLIES, YRS_RESIDENCE,
Y_BOX_GAMES
FROM SH.SUPPLEMENTARY_DEMOGRAPHICS);
```

FINISHED

Updated 4500 row(s).

Took 1 sec. Last updated by CBERGER at February 07 2018, 3:43:01 AM.

Display SUPPLEMENTARY\_DEMOGRAPHICS2 data

```
%sql
Select * from SUPPLEMENTARY_DEMOGRAPHICS2;
```

FINISHED

This is how you can share notebooks with OML templates and create notebooks from Machine Learning templates.

This completes the practice for sharing a notebook using Oracle Machine Learning templates and create notebooks from Machine Learning templates.