

Chathushi Jayarathna - Assignment 5

Lab Assessment Statement

Assignment 5 – Develop an Application

Referring to Assignment-1's Project Scenario,

The scope of this assignment is, to implement the previous Feedback portlet to a database-driven application for saving and retrieving the user data. Users can be left a message of his/her opinion to the "Online News Portal". This is a sample of what the final result should look like.

The screenshot displays a web application interface for a feedback system. On the left, a table titled 'Feedback' lists existing entries. On the right, a 'Feedback Form' allows users to submit new feedback.

FeedBack Subject	Message
Great!	Useful online news portal.
Awesome	This site gets regular updates daily

Feedback Form

Feedback Subject (Required)
Awesome

Feedback Message (Required)
This site gets regular updates daily

Submit Feedback

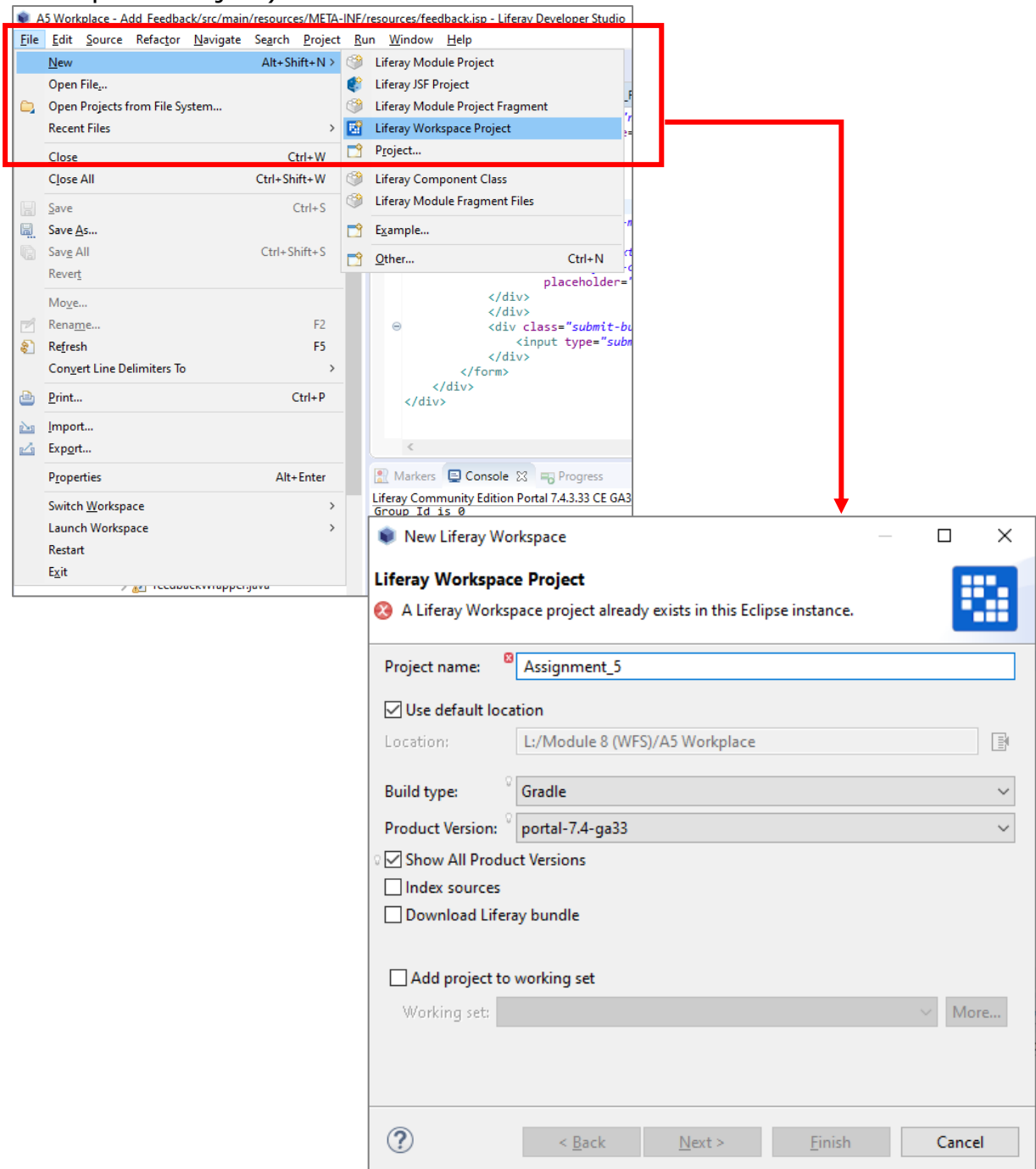
These are the steps provided to build an application.

1. To implement a database-driven application, right-click on previous Feedback MVC project -> create a new Liferay service builder with package path "com.liferay.docs.feedback". Use the namespace as FB.
2. Create an entity as a local service in service.xml with entity name Feedback.
3. Define the columns as the following.
 - `<column name="feedbackId" type="long" primary="true"></column>`
 - `<column name="feedbackDate" type="Date"></column>`
 - `<column name="feedbackText" type="String"></column>`
 - `<column name="feedbackSubject" type="String"></column>`
 - `<column name="companyId" type="long"></column>`
 - `<column name="groupId" type="long"></column>`
 - `<column name="userId" type="long"></column>`

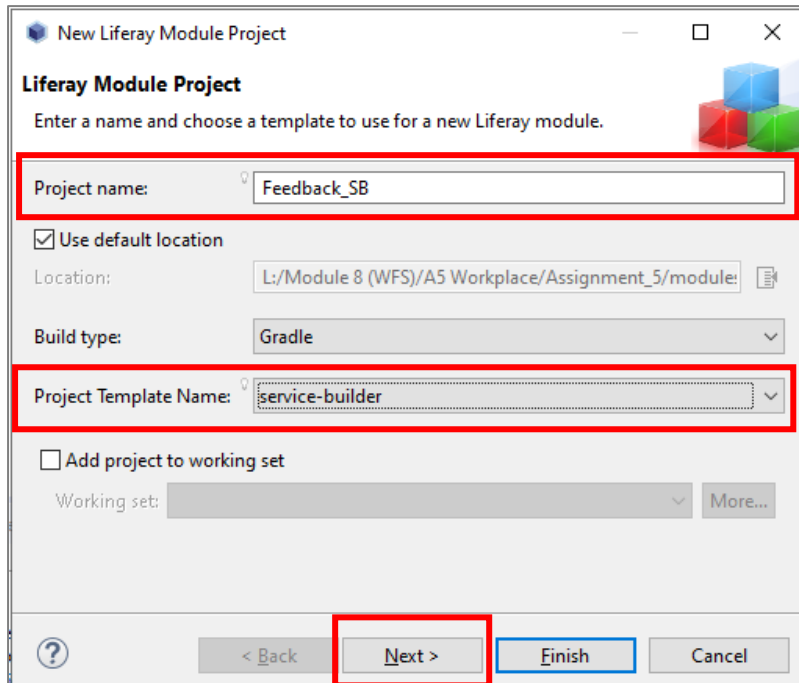
	<ol style="list-style-type: none"> 4. In service.xml, define the order of feedback entity by ascending feedbackId. 5. In service.xml, define Service Entity Finder Methods for GroupId, CompanyId and feedbackText cloumns. 6. Build your service. If build success, check the service Builder generates classes and interfaces belonging to the persistence layer, service layer, and model layer. 7. Expose the Finder in the Service Layer *LocalServiceImpl. Implement a service layer for Feedback entity and create a method "addFeedback" that adds Feedbacks to the database. 8. Update controller (your portlet class) action method to handle the Feedback form. 9. Update view.jsp page to display all the feedback. 10. Build your service application, deploy your portlet, and try adding some Feedback for your portal. <p>Provide caption and screenshots for each step.</p> <p>Provide screen capture of final result pages.</p>
Technical Environment	-
Guidelines	-
Duration	120 mins

1. To implement a database-driven application,

Step 1 - Create Liferay Workplace Project (File → New → Liferay Workplace Project)



Step 2 - Right-click on the Feedback MVC project → create a new Liferay service builder (Package → "com.liferay.docs.feedback")



New Liferay Module Project

Liferay Module Project
Enter a name and choose a template to use for a new Liferay module.

Project name: Feedback_SB

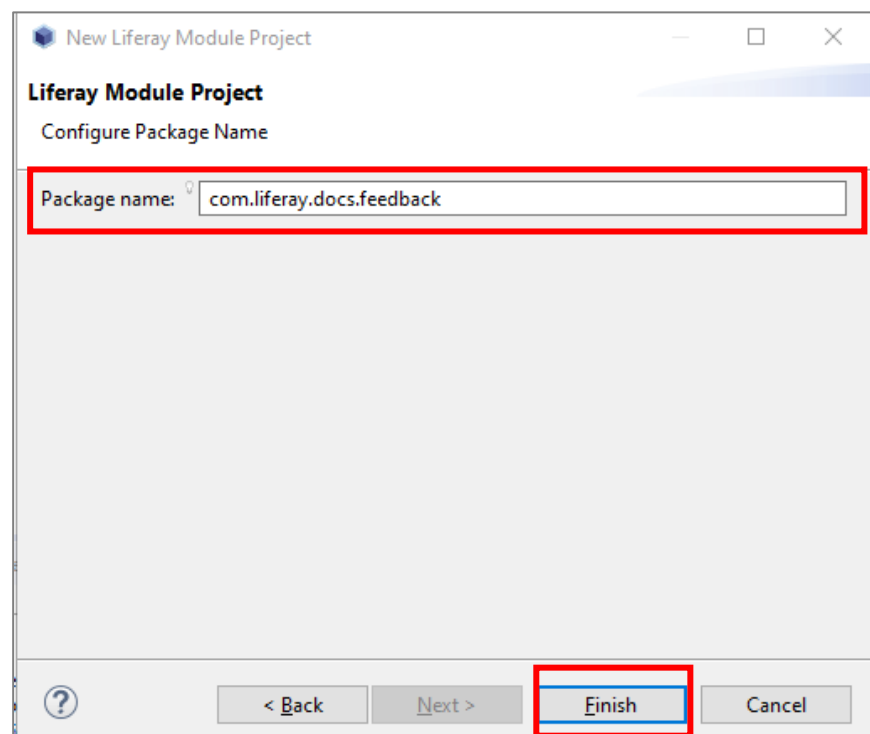
☒ Use default location
Location: L:/Module 8 (WFS)/A5 Workplace/Assignment_5/module:

Build type: Gradle

Project Template Name: service-builder

☐ Add project to working set
Working set: More...

< Back Next > Finish Cancel



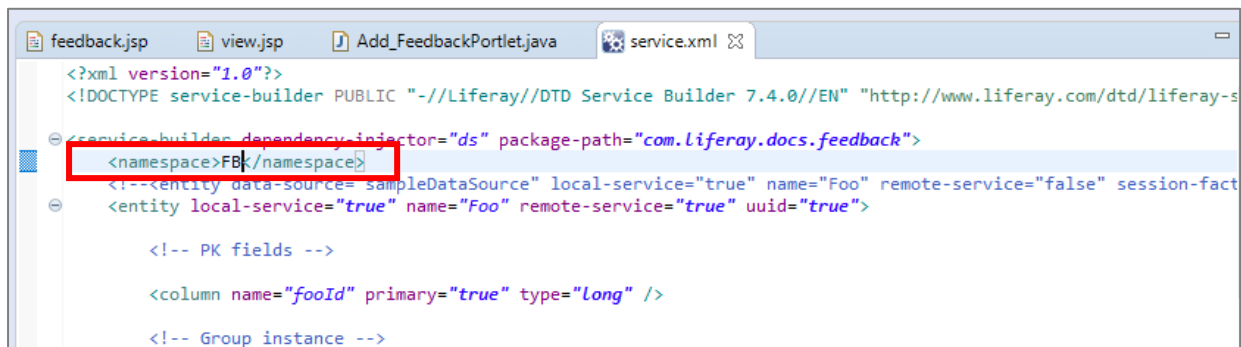
New Liferay Module Project

Liferay Module Project
Configure Package Name

Package name: com.liferay.docs.feedback

< Back Next > Finish Cancel

Step 3 – Give the namespace as “FB” in “service.xml”



The screenshot shows the 'service.xml' file in an IDE. The XML content is as follows:

```
<?xml version="1.0"?>
<!DOCTYPE service-builder PUBLIC "-//Liferay//DTD Service Builder 7.4.0//EN" "http://www.liferay.com/dtd/liferay-s
<service-builder dependency-injector="ds" package-path="com.liferay.docs.feedback">
  <namespace>FB</namespace>
  <!--<entity data-source= sampleDataSource" local-service="true" name="Foo" remote-service="false" session-fact
  <entity local-service="true" name="Foo" remote-service="true" uuid="true">

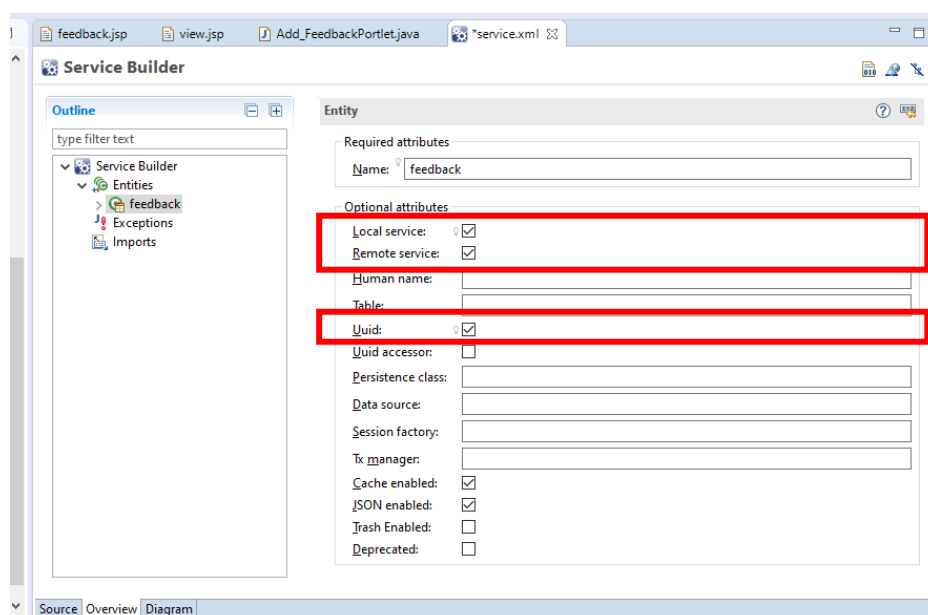
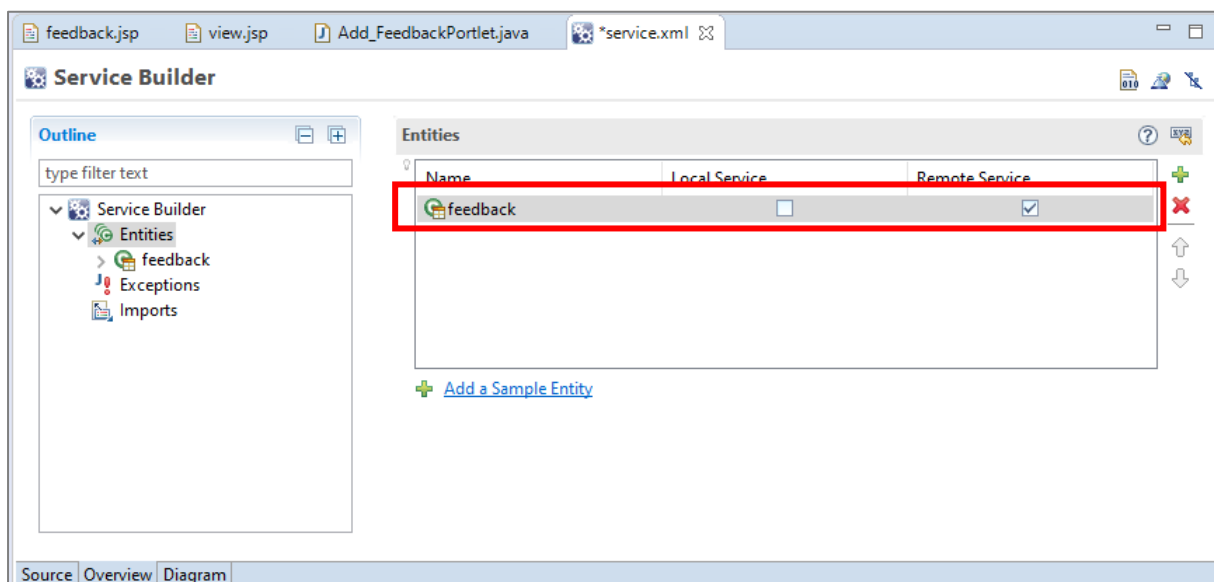
    <!-- PK fields -->

    <column name="fooId" primary="true" type="long" />

  <!-- Group instance -->
```

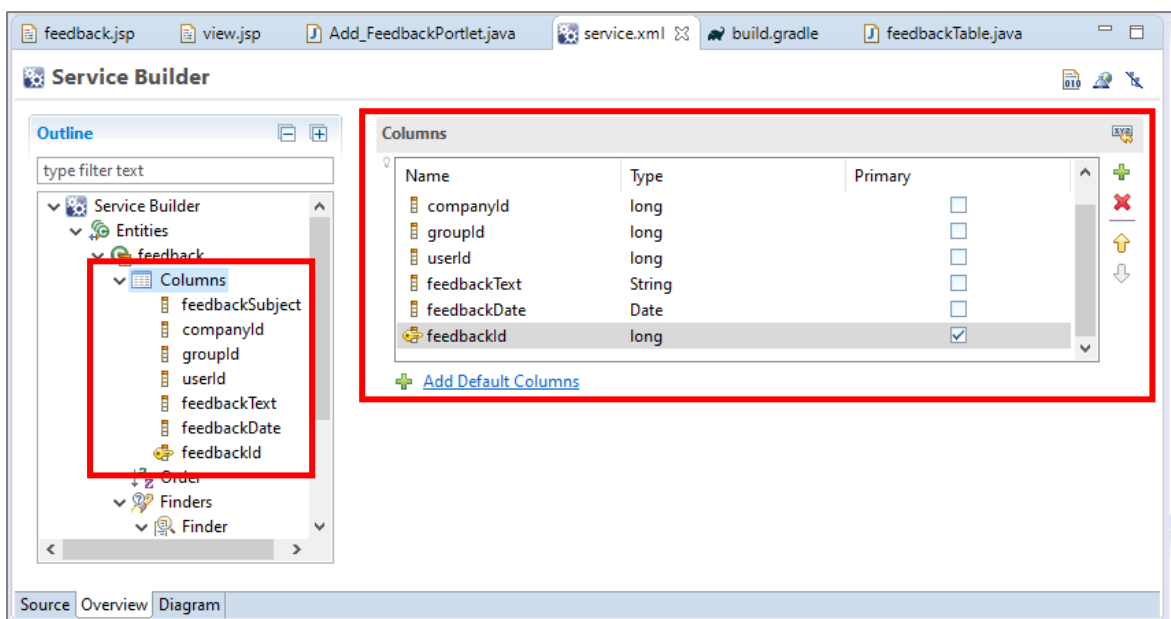
The line `<namespace>FB</namespace>` is highlighted with a red box.

Step 4 - Create an entity as a local service in service.xml with the entity name Feedback.

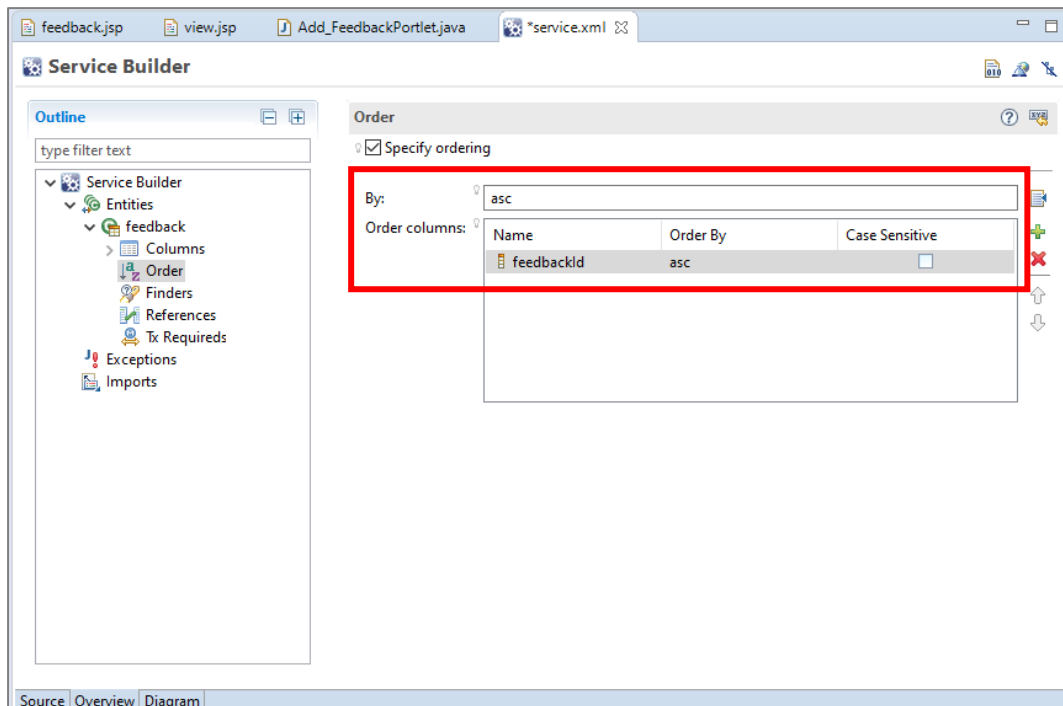


Step 5 - Define the columns as the following.

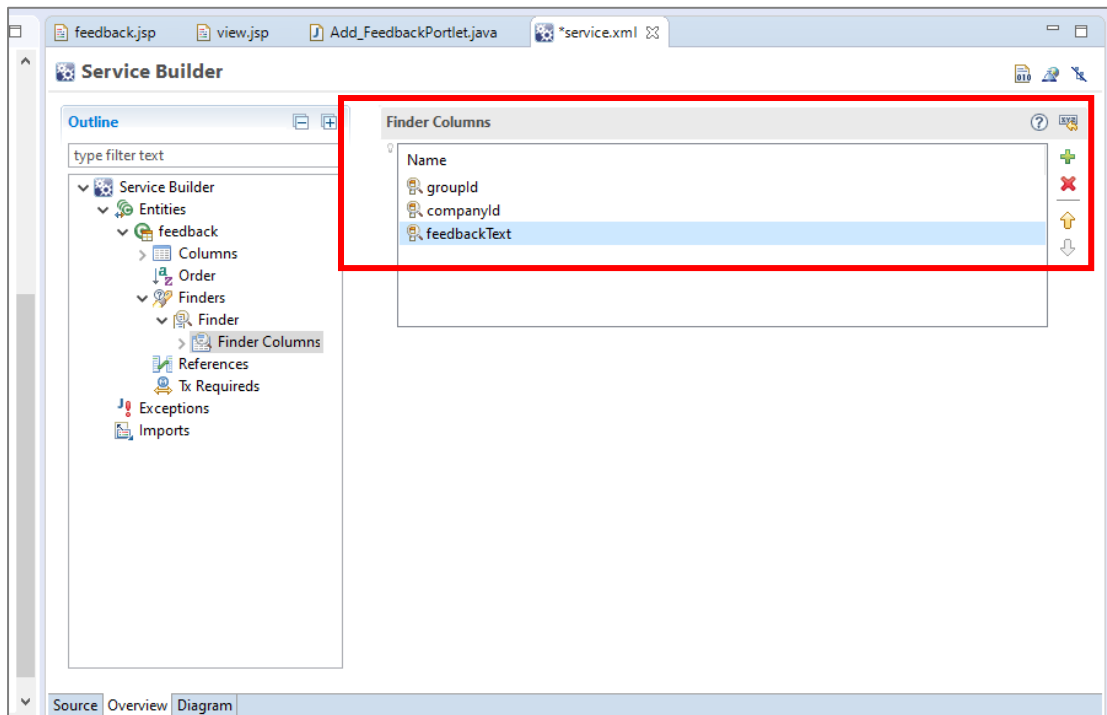
```
<column name="feedbackId" type="long" primary="true"></column>
<column name="feedbackDate" type="Date"></column>
<column name="feedbackText" type="String"></column>
<column name="feedbackSubject" type="String"></column>
<column name="companyId" type="long"></column>
<column name="groupId" type="long"></column>
<column name="userId" type="long"></column>
```



Step 6 - In service.xml, define the order of feedback entity by ascending feedbackId.



Step 7 - In service.xml, define Service Entity Finder Methods for groupId, companyId, and feedback text columns.



Step 8 - Build your service. If the build success, check the service Builder generates classes and interfaces belonging to the persistence layer, service layer, and model layer.


```
feedback.jsp  view.jsp  Add_FeedbackPortlet.java  service.xml  build.gradle
```

```
dependencies {  
    compileOnly group: "com.liferay.portal", name: "release.portal.api"  
  
    cssBuilder group: "com.liferay", name: "com.liferay.css.builder", version: "3.1.0"  
  
    compile project(":modules:Feedback_SB:Feedback_SB-api");  
}
```

- ▼ Assignment_5
 - > JRE System Library [JavaSE-11]
 - > configs
 - > gradle
 - ▼ modules
 - > Add_Feedback
 - ▼ Feedback_SB
 - > Feedback_SB-api
 - ▼ Feedback_SB-service
 - ▼ src/main/java
 - ▼ com.liferay.docs.feedback.model.impl
 - > feedbackBasImpl.java
 - > feedbackCacheModel.java
 - > feedbackImpl.java
 - > feedbackModelImpl.java
 - ▼ com.liferay.docs.feedback.service.base
 - > feedbackLocalServiceBasImpl.java
 - > feedbackServiceBasImpl.java
 - ▼ com.liferay.docs.feedback.service.http
 - > feedbackServiceHttp.java
 - ▼ com.liferay.docs.feedback.service.impl
 - > feedbackLocalServiceImpl.java
 - > feedbackServiceImpl.java
 - ▼ com.liferay.docs.feedback.service.persistence.impl
 - > feedbackModelArgumentsResolver.java
 - > feedbackPersistencImpl.java
 - ▼ com.liferay.docs.feedback.service.persistence.impl.consta
 - > FBPersistenceConstants.java
 - ▼ src/main/resources
 - > META-INF
 - service.properties
 - > JRE System Library [JavaSE-11]
 - > Project and External Dependencies
 - > bin
 - > src

Step 9 - Expose the Finder in the Service Layer *LocalServiceImpl. Implement a service layer for the Feedback entity and create a method "addFeedback" that adds Feedback to the database.

```
)  
public class Add_FeedbackPortlet extends MVCPortlet {  
    public void feedbackMethod(ActionRequest request, ActionResponse response) {  
  
        DateFormat df=new SimpleDateFormat("dd/MM/yyyy");  
  
        int feedbackId =(int) CounterLocalServiceUtil.increment(feedback.class.toString());  
  
        String feedbackSubject=ParamUtil.getString(request, "subject");  
        Date feedbackDate= (Date) ParamUtil.getDate(request, "date",df);  
        String feedbackText=ParamUtil.getString(request, "message");  
        Long companyId=ParamUtil.getLong(request, "comid");  
        Long groupId=ParamUtil.getLong(request, "groupid");  
        Long userId=ParamUtil.getLong(request, "userid");  
  
        System.out.println("Subject is "+ feedbackSubject);  
        System.out.println("Date is "+ feedbackDate);  
        System.out.println("Message is "+ feedbackText);  
        System.out.println("Group Id is "+ groupId);  
        System.out.println("Company Id is "+ companyId);  
        System.out.println("User Id is "+ userId);  
    }  
}
```

Step 10 - Create a method "addFeedback" that adds Feedbacks to the database.

```
feedback fback = feedbackLocalServiceUtil.createfeedback(feedbackId);  
fback.setFeedbackSubject(feedbackSubject);  
fback.setFeedbackDate(feedbackDate);  
fback.setFeedbackText(feedbackText);  
fback.setGroupId(groupId);  
fback.setCompanyId(companyId);  
fback.setUserId(userId);  
feedbackLocalServiceUtil.addfeedback(fback);  
}
```

Step 11 - Update the controller (your portlet class) action method to handle the Feedback form.

```

package com.liferay.docs.feedback.portlet;

import com.liferay.counter.kernel.service.CounterLocalServiceUtil;

/**
 * @author PC
 */
@Component(
    immediate = true,
    property = {
        "com.liferay.portlet.display-category=category.sample",
        "com.liferay.portlet.header-portlet-css=/css/main.css",
        "com.liferay.portlet.instanceable=true",
        "javax.portlet.display-name=Add_Feedback",
        "javax.portlet.init-param.template-path=",
        "javax.portlet.init-param.view-template=/view.jsp",
        "javax.portlet.name=" + Add_FeedbackPortletKeys.ADD_FEEDBACK,
        "javax.portlet.resource-bundle=content.Language",
        "javax.portlet.security-role-ref=power-user,user"
    },
    service = Portlet.class
)
public class Add_FeedbackPortlet extends MVCPortlet {

    public void feedbackmethod(ActionRequest request, ActionResponse response) {

        DateFormat df=new SimpleDateFormat("dd/MM/yyyy");

        int feedbackId =(int) CounterLocalServiceUtil.increment(feedback.class.toString());

        String feedbackSubject=ParamUtil.getString(request, "subject");
        Date feedbackDate= (Date) ParamUtil.getDate(request, "date",df);
        String feedbackText=ParamUtil.getString(request, "message");
        Long companyId=ParamUtil.getLong(request, "comid");
        Long groupId=ParamUtil.getLong(request, "groupId");
        Long userId=ParamUtil.getLong(request, "userid");

        System.out.println("Subject is " + feedbackSubject);
        System.out.println("Date is " + feedbackDate);
        System.out.println("Message is " + feedbackText);
        System.out.println("Group Id is " + groupId);
        System.out.println("Company Id is " + companyId);
    }
}

```

Step 12 - Update view.jsp page to display all the feedback.

```

<div class="row" style="margin:20px">
<liferay-ui:search-container total="<%= feedbackLocalServiceUtil.getfeedbacksCount() %>">
<liferay-ui:search-container-results
results="<%= feedbackLocalServiceUtil.getfeedbacks(searchContainer.getStart(), searchContainer.getEnd()) %>"
/>

<liferay-ui:search-container-row
className="com.liferay.docs.feedback.model.feedback"
modelVar="aFeedback"
>
<liferay-ui:search-container-column-text property="feedbackText" name="" />
<liferay-ui:search-container-column-text property="feedbackSubject" name="" />
</liferay-ui:search-container-row>

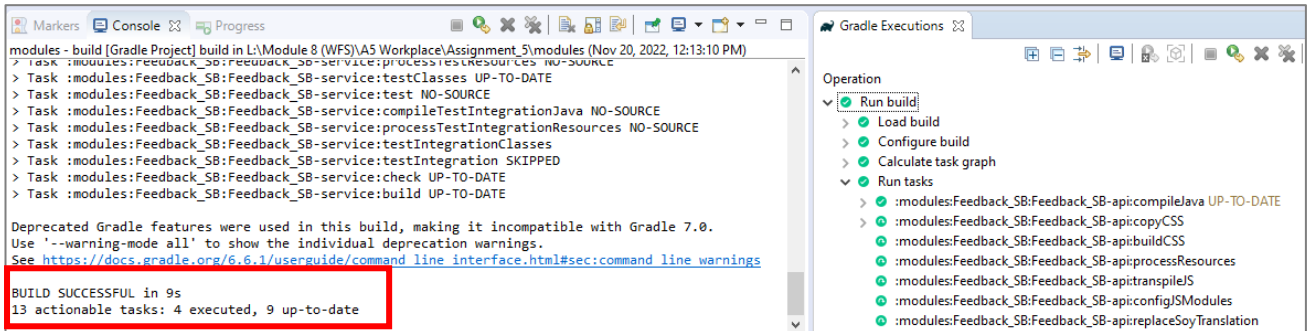
<liferay-ui:search-iterator />
</liferay-ui:search-container>

</div>

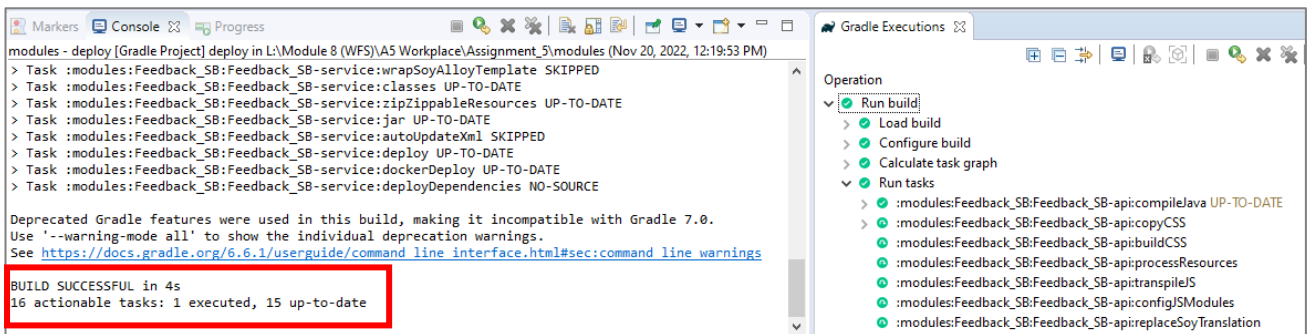
```

Step 13 - Build your service application, deploy your portlet, and try adding some Feedback for your portal.

✓ Build Service Application



✓ Deploy the portlet

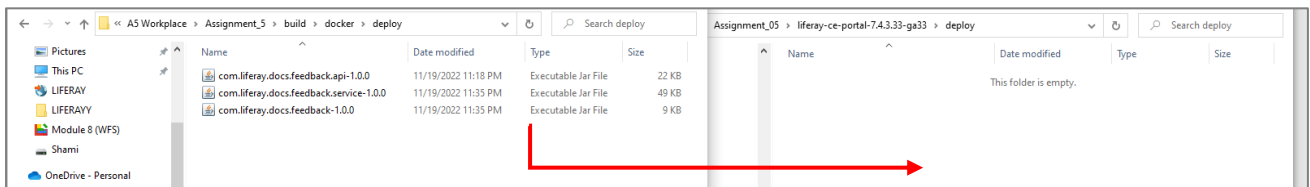


Step 14 - Go to

"L:\Module 8 (WFS)\A5 Workplace\Assignment_5\build\docker\deploy"

and drag and drop "com.liferay.docs.feedback.portlet-1.0.0" file to

"L:\Module 8 (WFS)\Assignment_05\liferay-ce-portal-7.4.3.33-ga33\deploy"



Step 15 – Fill out the Feedback Form

Feedback Form

We would love to hear your thoughts, suggestions, concerns or problems with anything so we can improve!

11/07/2022

Subject 3

Text 3

0

13

14

SUBMIT FEEDBACK

Step 16 - Add the Feedback for the portal and display all the feedback

Home

Feedback

Search...

Home

Add New Feedback

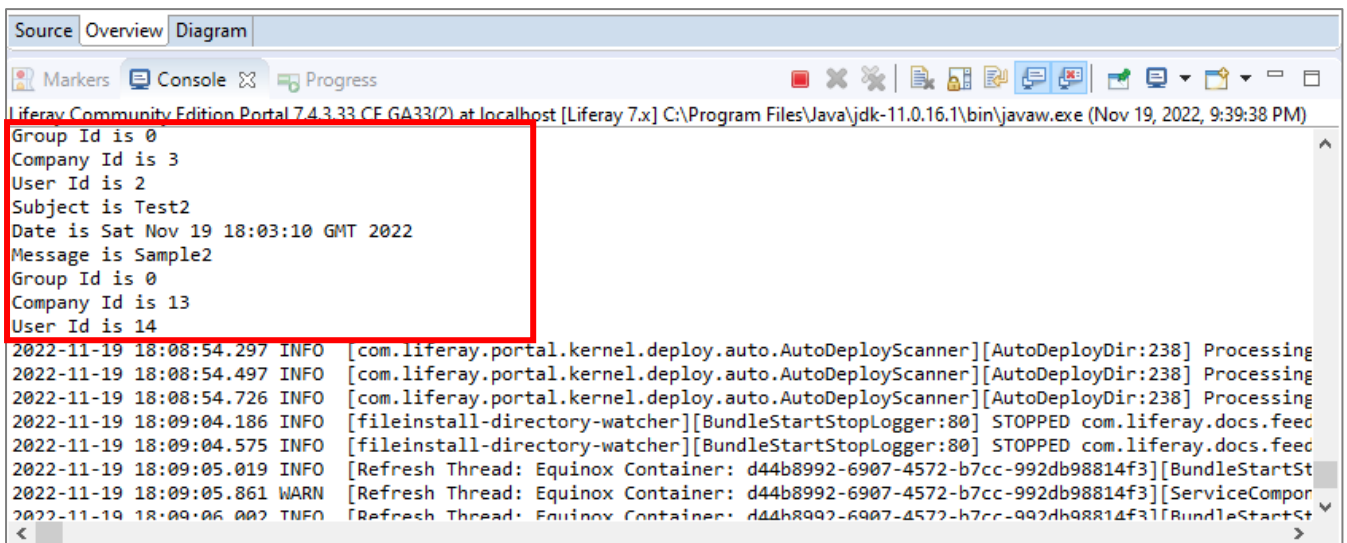
feedbackText	feedbackSubject
Sample1	Test1
Sample2	Test2
Sample3	Test3

Welcome to Liferay

Liferay Community Edition Portal 7.4.3.33 CE GA33
(Cavanaugh / Build 7403 / July 15, 2022)

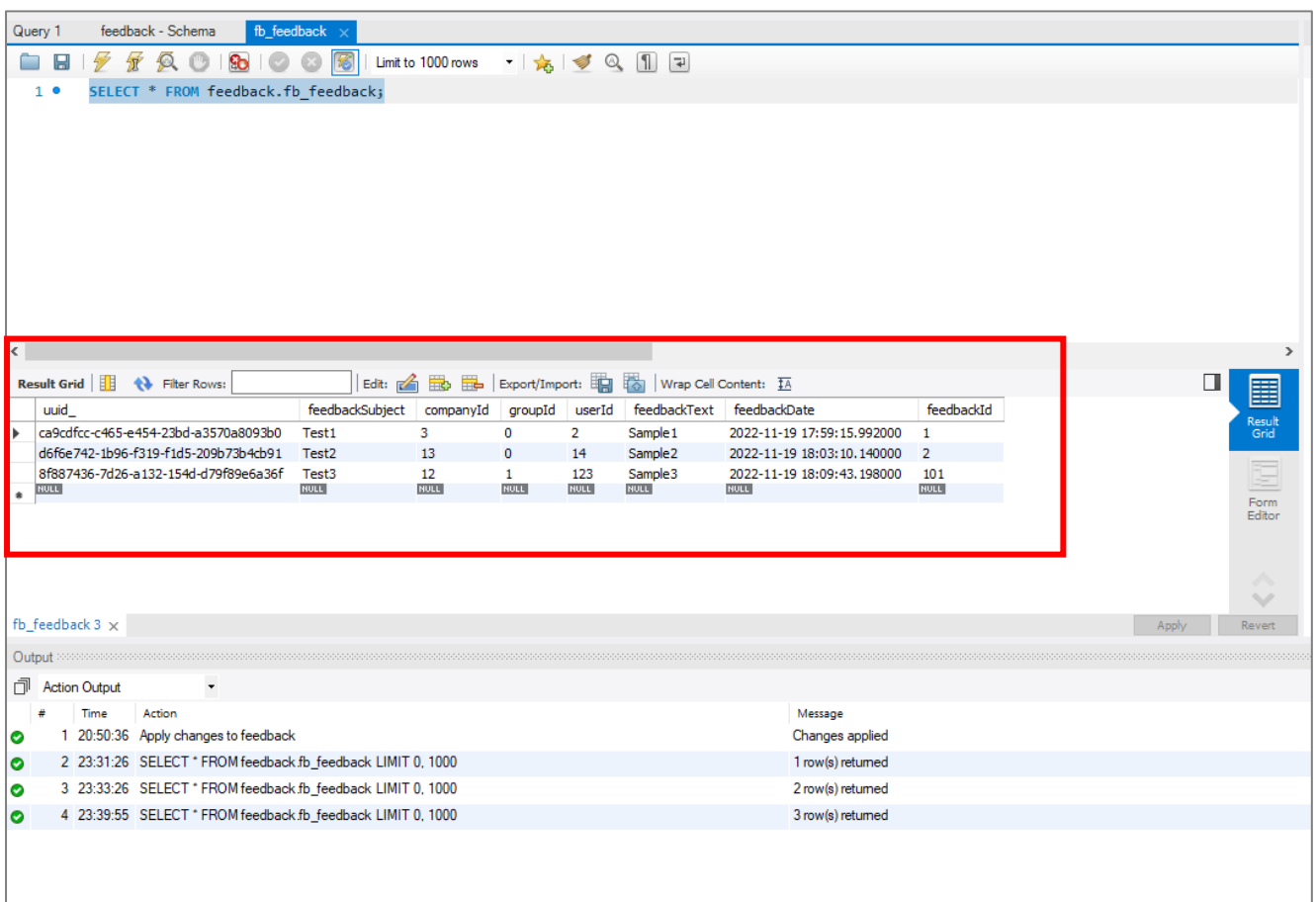
Powered by Liferay

✓ Print in the console



```
Liferay Community Edition Portal 7.4.3.33 CE GA33(2) at localhost [Liferay 7.x] C:\Program Files\Java\jdk-11.0.16.1\bin\javaw.exe (Nov 19, 2022, 9:39:38 PM)
Group Id is 0
Company Id is 3
User Id is 2
Subject is Test2
Date is Sat Nov 19 18:03:10 GMT 2022
Message is Sample2
Group Id is 0
Company Id is 13
User Id is 14
2022-11-19 18:08:54.297 INFO [com.liferay.portal.kernel.deploy.auto.AutoDeployScanner][AutoDeployDir:238] Processing
2022-11-19 18:08:54.497 INFO [com.liferay.portal.kernel.deploy.auto.AutoDeployScanner][AutoDeployDir:238] Processing
2022-11-19 18:08:54.726 INFO [com.liferay.portal.kernel.deploy.auto.AutoDeployScanner][AutoDeployDir:238] Processing
2022-11-19 18:09:04.186 INFO [fileinstall-directory-watcher][BundleStartStopLogger:80] STOPPED com.liferay.docs.feed
2022-11-19 18:09:04.575 INFO [fileinstall-directory-watcher][BundleStartStopLogger:80] STOPPED com.liferay.docs.feed
2022-11-19 18:09:05.019 INFO [Refresh Thread: Equinox Container: d44b8992-6907-4572-b7cc-992db98814f3][BundleStartSt
2022-11-19 18:09:05.861 WARN [Refresh Thread: Equinox Container: d44b8992-6907-4572-b7cc-992db98814f3][ServiceCompon
2022-11-19 18:09:06.002 INFO [Refresh Thread: Equinox Container: d44b8992-6907-4572-b7cc-992db98814f3][BundleStartSt
```

✓ Adding data to database



Query 1 feedback - Schema fb_feedback

1 • `SELECT * FROM feedback.fb_feedback;`

Result Grid

uuid_	feedbackSubject	companyId	groupId	userId	feedbackText	feedbackDate	feedbackId
ca9cdfcc-c465-e454-23bd-a3570a8093b0	Test1	3	0	2	Sample1	2022-11-19 17:59:15.992000	1
d6f6e742-1b96-f319-f1d5-209b73b4cb91	Test2	13	0	14	Sample2	2022-11-19 18:03:10.140000	2
8f887436-7d26-a132-154d-d79f89e6a36f	Test3	12	1	123	Sample3	2022-11-19 18:09:43.198000	101
...

fb_feedback 3 x

Output

Action Output

#	Time	Action	Message
1	20:50:36	Apply changes to feedback	Changes applied
2	23:31:26	SELECT * FROM feedback.fb_feedback LIMIT 0, 1000	1 row(s) returned
3	23:33:26	SELECT * FROM feedback.fb_feedback LIMIT 0, 1000	2 row(s) returned
4	23:39:55	SELECT * FROM feedback.fb_feedback LIMIT 0, 1000	3 row(s) returned