

# Summary

This is a web-based application that can be used to support the learnersourcing workflow in the PL/SQL programming class. The primary users of this web-based application are the students who have enrolled in the class. The purpose of this application is to help students connect the knowledge they've gained from the classroom to real-world situations.

There are three main functions of this web-based application: create, review, and practice. In the "Be an Expert" page, students can create a new worked-out example by clicking a button. A separate page with instructions will appear to guide students through the creation process. Students can review their in-progress and completed worked-out examples. In the "Be a Reviewer" page, students can review their classmates' worked-out examples by clicking on the WEID listed in the table. They are also responsible for reviewing revisions made by student creators. Finally, the "Be an Explorer" page allows students to practice with all "Certified" worked-out examples and sort them using the given filters.

The revised version of this web-based application has solved the issues that the reviewer has identified. Here is the list of changes:

1. Add a "Fun Facts" section to the homepage to help students learn some basic information about learnersourcing, worked-out examples, and overall workflow.
2. Separate the "Sign In" and "Sign Up" into two separate links.
3. Add a hamburger sign to all pages on the top right corner to allow users easy access to other pages.
4. Rearrange the order of tables on the page called "Be an Expert."
5. Add information icons next to "Status of Certification" and "WE ID" to explain what it means.
6. Add breadcrumbs under each table to deal with a large number of worked-out examples.
7. Add another page called "Conduct A Review."
8. Remove the "Learn more" on "Sign Up" Page.
9. Add a button named "Cancel and Exit" on the "Create a new worked-out example" page.



## The World of Worked-Out Examples in PL/SQL



[Home](#)

Use your Purdue Email to [Sign In](#)/ [Sign Up](#)

# Overview

[illegible]

## Fun Facts

## What is Learnersourcing?    Why you want to be the one in this world?

What is a worked-out example?      How did we develop this workflow?

## Be an Expert...

### Create or Finish Your Own Worked-Out Examples

## Be a Reviewer...

### Review Your Peer's Worked-Out Examples

## Be an Explorer...

Practice with CERTIFIED Worked-Out Examples

Need Help?[Contact Us](#)



This is the homepage of my web-based application designed for students and learners. In the top right corner, users can sign in or sign up using the provided link. There is a section called Overview where a student can see a summary of their performance from the last time he/she signed in. Next to the Overview, there is a section called “Fun Facts” where student could learn some basic information about the learnersourcing, worked-out example, and this system. The middle of the page features three buttons, each leading to a different page.

# Sign Up

Sign up

\* Name:

\*Purdue Email:

\* Password:

?

\* Re-type password

☐

I agree to the [Terms of Use](#) and [Privacy Policy](#).

Sign up

Sign in

Purdue Email:

Password:

Sign In

[Forgot password?](#)

Students can sign in/sign up by using their Purdue Email.

Hey FirstName, show your expertise to this world!

Home

> Be an Expert...

Good morning/afternoon/night, 

Username

New Worked-Out Examples:

Have some new ideas on how newly learned knowledge could be applied into real-world scenarios? Click the button below to create it!

Create a NEW Worked-Out Example

The Worked-Out Examples in Progress:

WE ID ⓘ	Status of Certification ⓘ ⚙	Topic	Date of Creation ⚙	Number of Responses ⚙	Ratings and Reviews
<a href="#">3</a>	<input type="checkbox"/>	Function	Feb 29th 2024	0	Not Available
<a href="#">4</a>	<input type="checkbox"/>	Procedure	Feb 29th 2024	0	Not Available

Page: [1](#), [2](#), [3](#), [4](#) ...

Completed Worked-Out Examples:

WE ID ⓘ	Status of Certification ⓘ ⚙	Topic	Date of Creation ⚙	Number of Responses ⚙	Ratings and Reviews
<a href="#">1</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 9th 2024	3	<a href="#">Read</a>
<a href="#">2</a>	<input type="checkbox"/>	Basic PL/SQL	Feb 29th 2024	3	<a href="#">Unread</a>

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This is the page that students see when they click on the "Be an Expert" button. On this page, they can click on the "Create a New Worked-out Example" button to go to a new page where they can create a new worked-out example. They can also view their completed worked-out examples and the ones that are in progress. They have the option to review and revise their completed worked-out examples and continue working on the ones that are in progress by clicking on the WEID.

Create a new worked-out example

←

→

✕

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https://

A Web Page

FirstName, let's create something new!

☰

[Home](#)

[Be an Expert](#)

Create a NEW Worked-Out Example

Good morning/afternoon/night, [Username](#)

Problem Background

Data

Solution

Self-Review

Problem Context and Description

Topics Practiced in this worked-out example

Basic PL/SQL

Function

Procedure

Triggers and Constraints

Others

Problem Context

Define the context of your worked-out example here.

Problem Description

Describe the problem of your worked-out example here.

Need Help?

Intentionally left blank for later implementation of ChatGPT

Cancel and Exit

Save and Exit

Save and Submit

This is the page that appears when a student clicks the "Create a New Worked-Out Example" button. Here, students can create their own worked-out examples following the provided instructions.

Hey FirstName, your peers need your energy!

Home

> Be a Reviewer...

Good morning/afternoon/night, 

Username

Worked-Out Examples Need Your Review:

WE ID	Status of Certification ⓘ	Topic	Date of Creation	Number of Reviews Needed
<a href="#">11</a>	<input type="checkbox"/>	Basic PL/SQL	Feb 9th 2024	3
<a href="#">22</a>	<input type="checkbox"/>	Basic PL/SQL	Feb 29th 2024	3
<a href="#">33</a>	<input type="checkbox"/>	Function	Mar. 1st 2024	2
<a href="#">44</a>	<input type="checkbox"/>	Procedure	Mar. 1st 2024	1

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Worked-Out Examples You Have Reviewed:

WE ID	Status of Certification ⓘ	Topic	Date of Creation	Number of Reviews Needed	Revision from Creator ⓘ
<a href="#">55</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 9th 2024	0	<a href="#">Not Required</a>
<a href="#">66</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 29th 2024	0	<a href="#">Completed</a>
<a href="#">77</a>	<input type="checkbox"/>	Function	Mar. 1st 2024	1	<a href="#">Updated</a>

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When students click on the "Be a Reviewer" button, they will be taken to this page that displays two tables. The first table contains all the worked-out examples that require peer review to become certified. By clicking on the WEID, students can access each worked-out example and conduct peer assessment. The second table lists all the worked-out examples that have been reviewed by the student. Students can track the updates and improvements made by the creator and adjust their review accordingly.

## Conduct a Review

A Web Page

https://

First Name, your peers value your suggestions!

Home > Be a Reviewer > Conduct A Review

Good morning/afternoon/night, Username

WEID: 11

Problem Context

Problem Description

Data

Table Name

Item One  
Item Two  
Item Three

Table Name

Item One  
Item Two  
Item Three

Table Name

Item One  
Item Two  
Item Three

Click here to download the SQL file for data insertion

Cancel and Exit

Save and Exit

Save and Submit

For Reviewer

Your solution:

Enter your proposed solutions here in the format of SQL codes.

Rate This Worked-Out Example on Following Criteria:

1 The exercise shows how PL/SQL knowledge can be applied to solve a real-world scenario.

Completely DisagreeDisagreeNeutralAgreeCompletely Agree

2 The exercise has a clear and easy-to-understand problem description.

Completely DisagreeDisagreeNeutralAgreeCompletely Agree

3 The exercise provides sufficient and meaningful example data for me to work on it.

Completely DisagreeDisagreeNeutralAgreeCompletely Agree

4 The answer provided in each step were all correct

Completely DisagreeDisagreeNeutralAgreeCompletely Agree

This is the page that appears when a student clicks the link of WEID listed in the table. On the left side of the screen, students will be able to view worked-out examples generated by their peers. On the right side of the screen, students will conduct peer reviews according to the instructions provided. Similar to creating a worked-out example, student reviewers will have the option to save their progress on reviewing a worked-out example or submit their review once they have finished.

Hey FirstName, let's do some practices!

Home > Be an Explorer...

Good morning/afternoon/night, Username

CERTIFIED Worked-Out Examples:

Sort By: All | Most Liked | Latest | Recommended by Instructors | You might be interested in

WE ID	Status of Certification	Topic	Date of Creation	Number of Responses	Number of Likes	Recommended by Instructors
<a href="#">12</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 9th 2024	3	3	<input checked="" type="checkbox"/>
<a href="#">13</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 29th 2024	3	2	<input type="checkbox"/>
<a href="#">14</a>	<input checked="" type="checkbox"/>	Function	Mar. 1st 2024	4	4	<input checked="" type="checkbox"/>
<a href="#">15</a>	<input checked="" type="checkbox"/>	Procedure	Mar. 1st 2024	5	3	<input type="checkbox"/>

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Worked-Out Examples You Have Practiced:

WE ID	Status of Certification	Topic	Date of Creation	Number of Responses	Number of Likes	Recommended by Instructors
<a href="#">12</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 9th 2024	3	3	<input checked="" type="checkbox"/>
<a href="#">13</a>	<input checked="" type="checkbox"/>	Basic PL/SQL	Feb 29th 2024	3	2	<input type="checkbox"/>
<a href="#">14</a>	<input checked="" type="checkbox"/>	Function	Mar. 1st 2024	4	4	<input checked="" type="checkbox"/>
<a href="#">15</a>	<input checked="" type="checkbox"/>	Procedure	Mar. 1st 2024	5	3	<input type="checkbox"/>

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On this page, students can click on the WEID of each worked-out example to access them. They can filter the list of certified worked-out examples by clicking the provided choices. Then, they will be able to practice with each worked-out example. Once they submit their own solutions, they can review the answers provided by their classmates and leave comments or suggestions for the creators. There is another table used to record all worked-out examples have been practices by student.