

Modern ABAP Questions

This document only includes answers to key questions that were not discussed during the live course.

Week 1: The Basics of Object-Oriented Programming for ABAP (OO-ABAP)

The answers to questions asked during Week 1 of Modern ABAP (*The Basics of Object-Oriented Programming for ABAP*), held on September 10, 2024, are as follows:

1. **In my company, we use SAP HANA Studio (which is Eclipse-based), I suppose this is OK too, or pure Eclipse and ADT is better? Is SAP Hana Studio the same or similar to pure Eclipse?**

SAP is setting the standards on that. I recommend checking <https://tools.hana.ondemand.com> and deciding accordingly.

2. **I have the following scenario: I have a parent object, and 5 child objects. Now I want that any update in the child object will report to the parent object. Each object/instance is isolated. It means that I have to store the parent object in the child object and call the parent object method to update the data inside my parent? Or is there any other method to get informed by the children?**

I wouldn't recommend an inheritance based permanent solution. But if you do, there are two solutions to your issue. You can either store the parent class as an object instance within the child class (composition), or simply access the parent class via the `super->` prefix. You can access public and protected components of the parent class that way.

3. **Can we use Eclipse on SAP ECC 6 EHP 8 without SAP S/4HANA?**

I did use Eclipse on R/3 systems, but I'm not exactly sure about the version map. You may need to install/activate some components on your back-end system. You can simply follow the instructions on <https://tools.hana.ondemand.com> and try!

4. **Using classes functionality in other classes like in JSON creation—is it called Façade pattern?**

The purpose of Façade is to take a complicated system and provide an easy-to-understand cockpit-style class to take care of common functionality. It has benefits like making tasks of other programmers easier, as well as reducing boilerplate code in some cases.

You could have a Façade for JSON creation if needed—but a Façade class typically accesses multiple underlying classes to achieve a result. Otherwise, you could be overengineering or implementing the “Poltergeist” anti-pattern.

5. **If a class implements more than one interface, the class needs to be cast to which interface?**

We can pick whichever we want! You can freely cast the object to interface A, B, C, etc.; whichever is needed for the task at hand.

6. Class inheritance-based design is not a good idea. Could this be an exception: Senior team builds floorplans and the developers make use of them using inheritance?

When I act as the lead developer, I usually build “interfaces” and let developers make use of them using “classes”. I don’t use inheritance as a main design element. In my UML diagrams, you would see interfaces interacting, and main programs/applications rely on interfaces, not classes.

7. What is the difference between methods in local class and private methods?

They interlap for sure. I avoid local classes as much as possible. It doesn’t make sense to me when I can turn it into a separate reusable global class.

8. Where Used does same thing [as SEOMETAREL]? Does that work?

Where Used List and SEOMETAREL seem to overlap in simple cases. But when you have a popular interface, which brings up a Where Used List with 200 entries, it’s nice to distinguish child classes easily over SEOMETAREL.