DAY - 2 LEARNING SUMMARY ANSWERS:

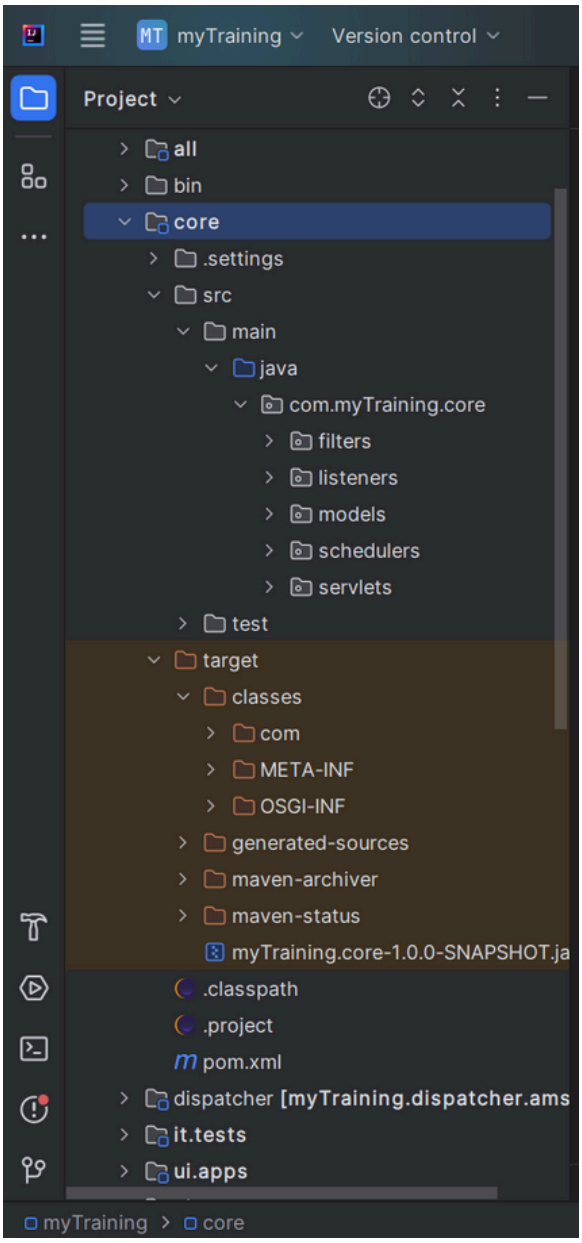
1.What is the purpose of the core module in AEM?

The core module in AEM provides reusable components and functionalities that follow best practices. It includes pre-built components like text, image, carousel, and page, which help developers build pages quickly while ensuring performance, scalability, and maintainability.

2.What kind of files and code can be found in the core folder?

The core folder in AEM typically contains:

1. Java Code
2. HTML
3. CSS
4. JavaScript
5. XML and Configuration Files



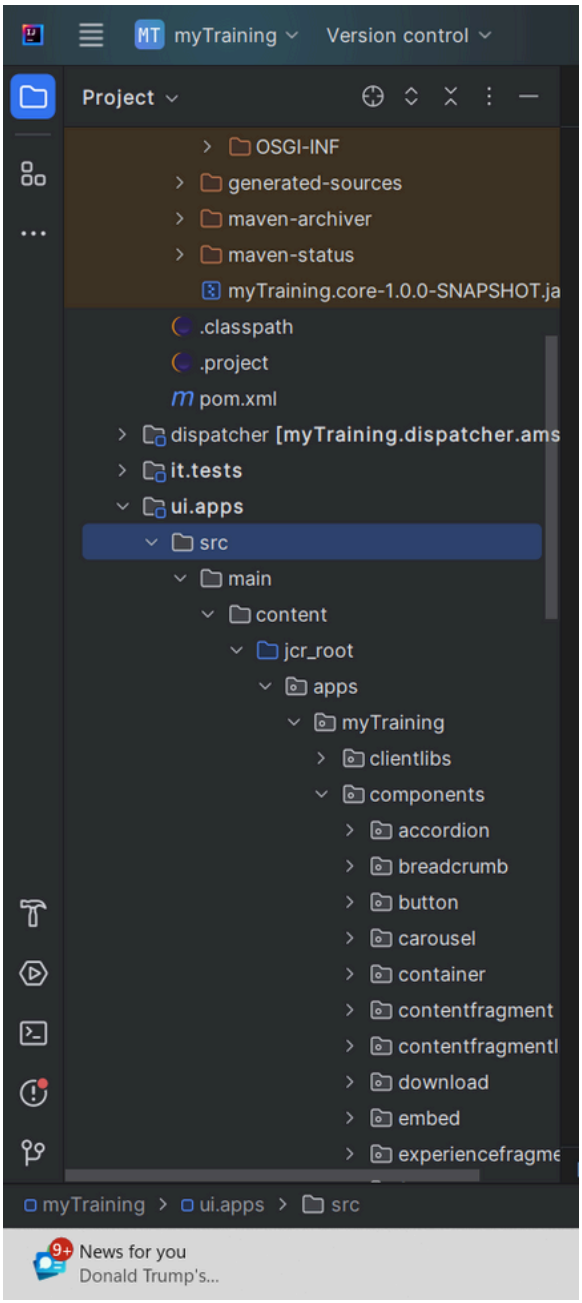
It mainly holds the core components and backend logic that make AEM sites function efficiently.

3.Explain the role of ui.apps in AEM projects.

The ui.apps module is responsible for deploying code and configurations to the AEM instance. Its main role is to deliver the project's functional and visual elements to AEM.

4.How are components structured in the ui.apps folder?

In the ui.apps folder, components are structured under ui.apps/src/main/-content/jcr_root/apps/myTraining/components

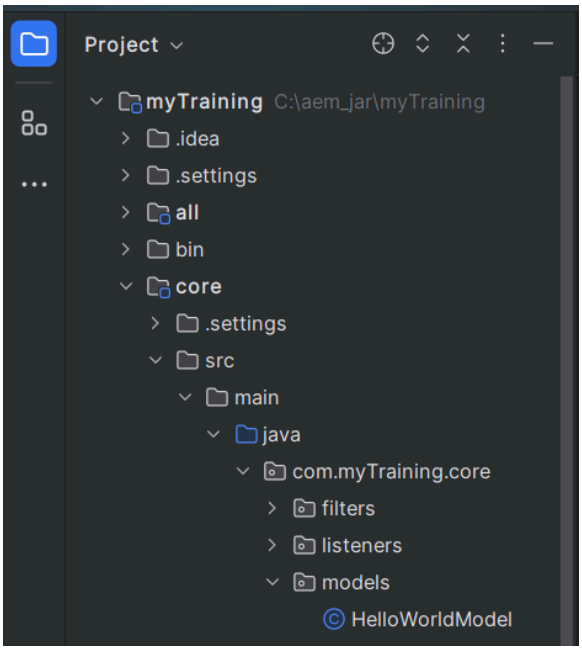


Hello World Component:

5. Where is the Hello World component located in both core and ui.apps?

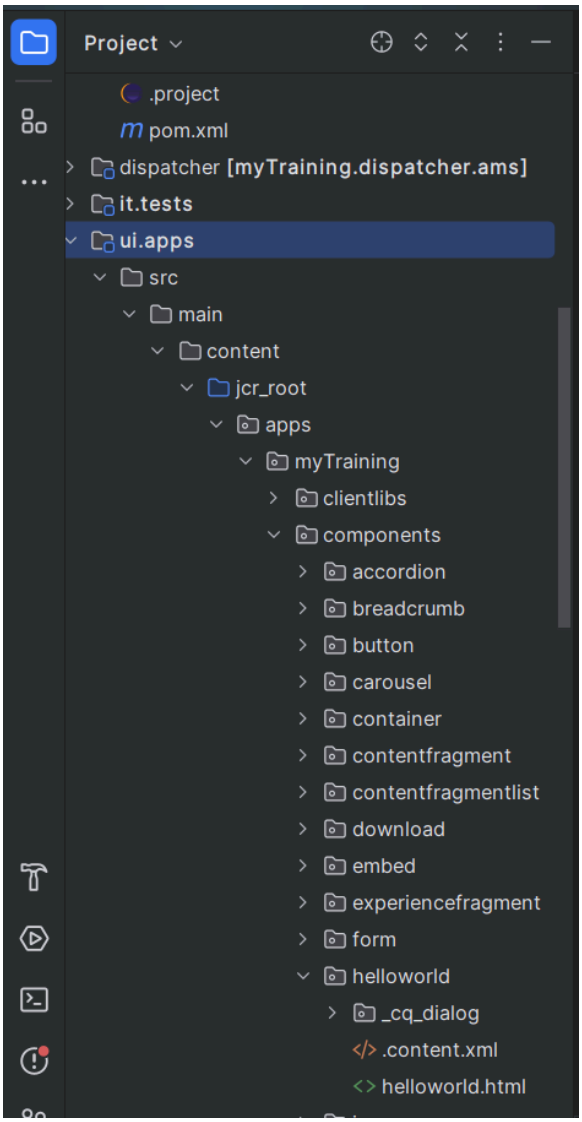
in Core Module:

core/src/main/java/com.myTraining.core/models/HelloWorldModel.java



in ui.apps Module:

ui.apps/src/apps/myTraining/components/helloworld



6. Explain the Java class (in core) for the Hello World component.

The Hello World Java class in the core module is a Sling Model that provides backend logic for the component. It retrieves data from AEM using dependency injection and makes it available for the frontend. This allows dynamic content rendering while following AEM best practices.

7. How does the HTML script work in ui.apps for Hello World?

The HTML script in the ui.apps module for the Hello World component is written in HTML. It fetches data from the Sling Model and renders it in the UI. First, Gets the Sling Model and displays the message. The output message is from sling model.

8. How are properties and dialogs defined for this component?

- Properties are stored in cq:dialog under /apps/project/components/componentName.
- Dialogs define the UI for content authors to input data.

  They are written in XML.

9. What are the different types of AEM modules

- core
- ui.apps
- ui.content
- ui.config
- ui.tests

10. How does Maven build these modules?

Maven compiles Java code, processes frontend resources, and packages them into a deployable AEM package that can be installed on the server.

11. Explain the build lifecycle of Maven in the context of AEM.

- clean – Deletes old build files.
- compile – Compiles Java code.

- test – Runs unit tests.
- package – Creates the AEM package.
- install – Installs it in the local repository.
- deploy – Deploys to the AEM server.

12. How are dependencies managed in pom.xml?

Dependencies are added under <dependencies> and fetched from Maven repositories.

13. Why is Maven used instead of other build tools?

Maven automates dependency management, project structuring, and builds while integrating well with AEM.

14. What advantages does Maven offer for AEM development?

- Standardized project structure.
- Automatic dependency resolution.
- Easy integration with AEM for deployment.

15. How does Maven help in managing dependencies and plugins in AEM projects?

- Dependencies – Fetch required libraries
- Plugins – Automate tasks like code compilation, testing, and deployment.

16. What does mvn clean install do in an AEM project?

- clean – Deletes previous build files.
- install – Compiles, packages, and installs the project in the local repository.

17. How to deploy packages directly to AEM using Maven commands?

mvn clean install -PautoInstallPackage -Dmaven.test.skip=true

This maven command deploys the packages directly to AEM

18. Explain the purpose of different Maven profiles in AEM (autoInstallPackage, autoInstallBundle).

- autoInstallPackage – Deploys the entire package to AEM.
- autoInstallBundle – Deploys only the OSGi bundle (Java code).

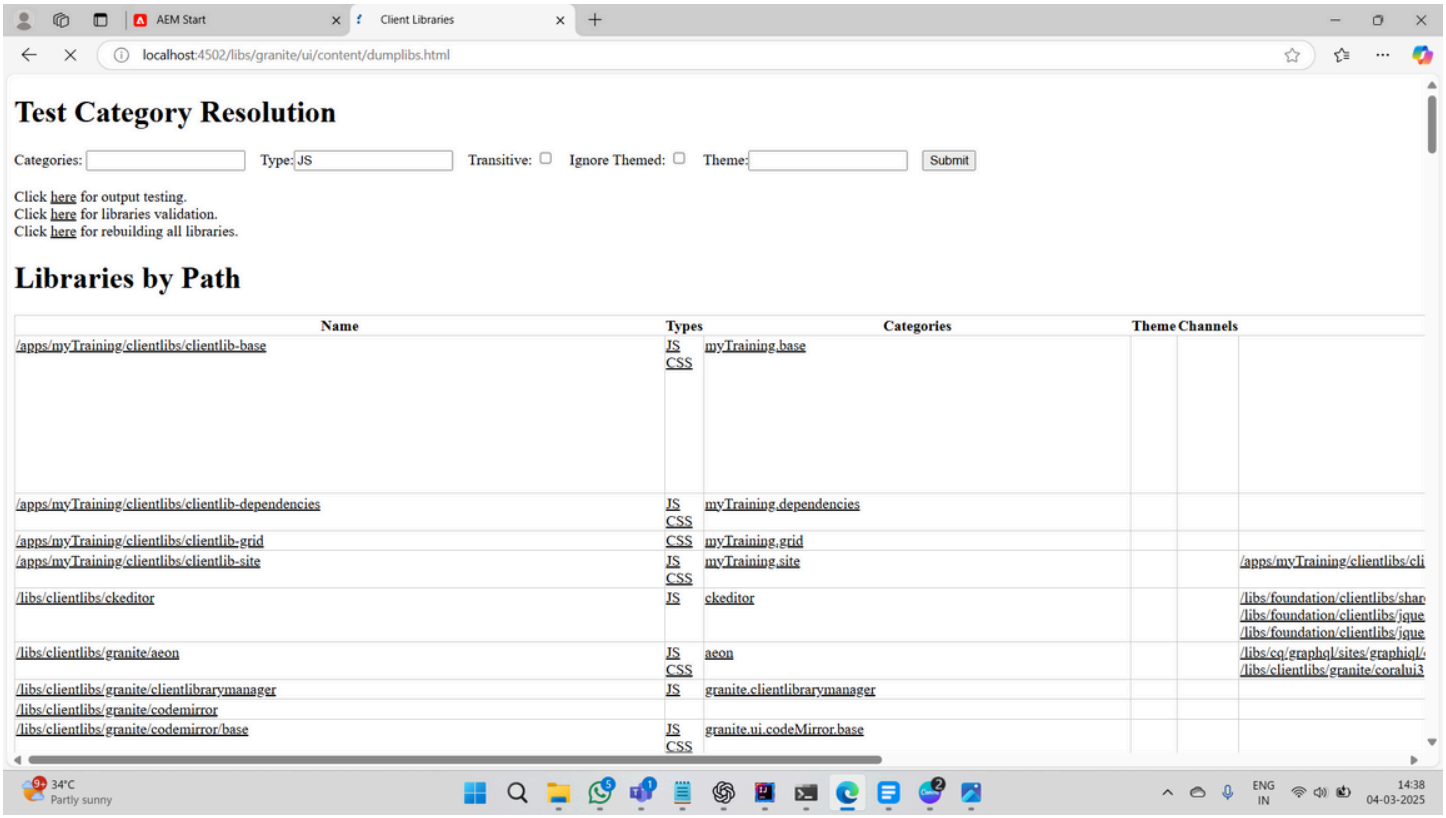
19. What is the purpose of dumplibs in AEM?

It lists all client libraries and their dependencies to debug client-side issues.

20. How can you view client libraries using dumplibs?

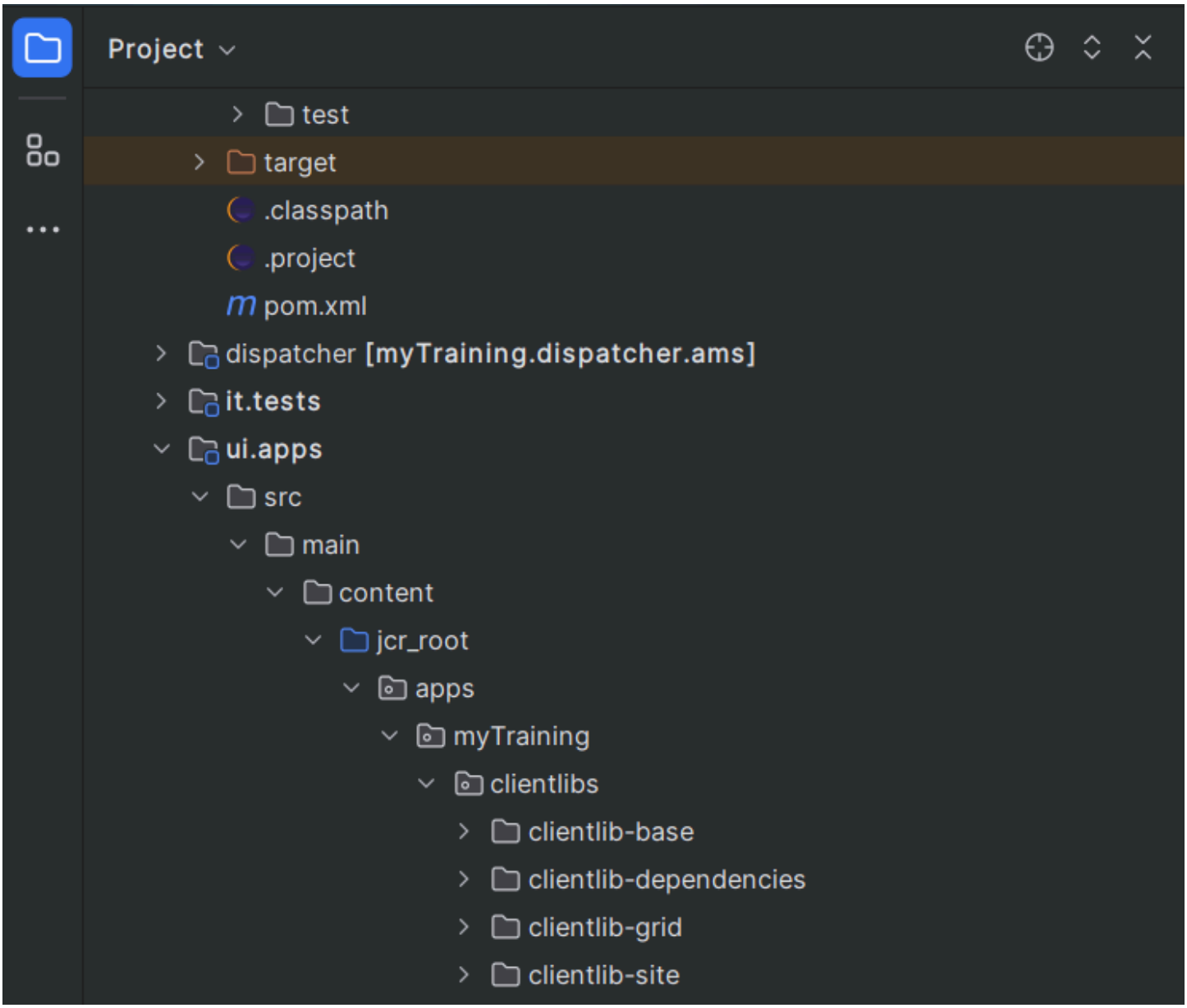
Go to -> http://localhost:4502/libs/granite/ui/content/dumplibs.html

This shows loaded client libraries and dependencies.



21. Explain how client libraries are structured in AEM.

Client libraries are structured like this -> ui.apps/src/main/content/jcr_root/apps/myTraining/clientlibs


Project
test
target
.classpath
.project
pom.xml
dispatcher [myTraining.dispatcher.ams]
it.tests
ui.apps
src
main
content
jcr_root
apps
myTraining
clientlibs
clientlib-base
clientlib-dependencies
clientlib-grid
clientlib-site