

What is the purpose of the core module in AEM?

The core module in AEM holds the Java logic (like Sling Models and servlets) that powers your website's features. It's where you write code to handle data and business rules, separate from the front-end presentation.

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

❓ `ui.apps` holds the front-end code (HTML, CSS, JavaScript) and component definitions for your AEM website.

❓ It's where you define how your website looks and behaves.

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

❓ Components are organized as folders within `ui.apps/content/yourproject/components`.

❓ Each component folder contains HTL scripts, client libraries, and dialog definitions.

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

Hello World Component:

- **Where is the Hello World component located in both core and `ui.apps`?**
 - `core`: Java class (e.g., `HelloWorldModel.java`) within a package structure
 - `ui.apps`: Folder within `ui.apps/content/yourproject/components`

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

- The Java class (often a Sling Model) retrieves data or performs logic needed by the component.
- It uses annotations to map data to HTL scripts.

- **How does the HTL script work in `ui.apps` for Hello World?**

- The HTL (HTML Template Language) script (`helloworld.html`) displays the component's content.
- It uses expressions to access data from the Java class.

- **How are properties and dialogs defined for this component?**

- Dialogs (XML files in the component folder) define the component's editable properties in AEM's authoring interface.
- Properties are then used by the HTL scripts.

What are the different types of AEM modules (`core`, `ui.apps`, `ui.content`, etc.)?

❓ **core**: Java logic.

❓ **ui.apps**: Front-end code and component definitions.

? **ui.content:** Initial content and configuration.

? **ui.config:** OSGI configurations.

? **ui.tests:** Automated tests.

? **all:** Aggregates all modules for deployment.

How does Maven build these modules?

Maven automates the build process, compiling code, packaging modules, and deploying to AEM.

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

? Maven follows a lifecycle (clean, compile, package, install, deploy).

? In AEM, this includes building OSGi bundles, packaging content, and deploying to the AEM server.

How are dependencies managed in pom.xml?

? pom.xml lists project dependencies (libraries, plugins).

? Maven downloads and manages these dependencies

Why is Maven used instead of other build tools?

Maven standardizes build processes, simplifies dependency management, and promotes consistency.

What advantages does Maven offer for AEM development?

? Automates complex AEM build and deployment tasks.

? Manages dependencies and plugins efficiently.

? Promotes a structured project layout.

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

pom.xml defines dependencies and plugins, and Maven automatically handles their versions and retrieval.

What does mvn clean install do in an AEM project?

- ❑ mvn clean deletes previous build artifacts.
- ❑ mvn install compiles code, packages modules, and installs them in the local Maven repository.

How to deploy packages directly to AEM using Maven commands?

- ❑ Maven plugins (like content-package-maven-plugin) deploy packages directly to AEM.
- ❑ Using maven profiles, you can target different AEM instances.

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

- ❑ Profiles customize builds for different environments (dev, test, production).
- ❑ autoInstallPackage and autoInstallBundle automatically deploy packages and bundles to AEM.

What is the purpose of dumplib in AEM?

- ❑ dumplib is a debugging tool.
- ❑ it gives you a list of the client libraries that are loaded on the AEM instance.

How can you view client libraries using dumplib?

By going to `/libs/granite/ui/content/dumplib.html` on your AEM instance you can view all of the client libraries that are loaded.

Explain how client libraries are structured in AEM.

- ❑ Client libraries (clientlibs) are folders containing CSS, JavaScript, and images.
- ❑ They're used to organize front-end resources and optimize performance.