

To run a **Groovy "Hello World" script** in XWiki, you can use the **Script Macro**. XWiki allows you to embed Groovy code directly inside wiki pages using this macro.

Here's how you can run a simple "Hello World" Groovy script in XWiki:

Steps

1. **Go to a Wiki Page** (create a new one or edit an existing page).
2. **Edit the page in Wiki or WYSIWYG mode**.
3. **Insert the following script**:

```
xwiki  
{{groovy}}  
println("Hello, world from Groovy in XWiki!")  
{{/groovy}}
```

4. **Save the page**.
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Permissions

Make sure the user running the script has **programming rights**. Without it, the script will not execute and may show a permissions error.

Output

- The output "Hello, world from Groovy in XWiki!" will be displayed in the rendered page.
- If using `println`, the output goes to the **page content area**.
- You can also return a value instead of printing:

```
groovy  
return "Hello, world from Groovy!"
```

Lab Guide: Running Groovy Script with Variables in XWiki

Objective

Learn how to write and execute a **Groovy script** in XWiki that defines and uses **variables**.

Prerequisites

- Access to an **XWiki instance**.
 - A user account with **programming rights**.
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Tools Used

- **XWiki**
 - **Groovy Scripting**
 - **Script Macro (`{{groovy}}`)**
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Step-by-Step Instructions

Step 1: Open or Create a Wiki Page

1. Log in to your XWiki instance.
2. Navigate to any space.
3. Click "Create" or "Edit" an existing page.

Step 2: Enter the Script Macro

In **Wiki** or **WYSIWYG** mode, paste the following code:

```
xwiki  
{{groovy}}  
def name = "Alice"  
def greeting = "Hello, ${name}!"  
return greeting  
{/groovy}}
```

Explanation:

- `name` is a variable storing a string.
- `greeting` is constructed using string interpolation.
- The script returns the value of `greeting` to be displayed on the page.

Step 3: Save and View the Page

1. Click "Save & View".
2. You should see:

Hello, Alice!

Bonus: Try Changing the Variable

Try changing the value of the `name` variable:

```
groovy
```

```
def name = "Bob"
```

You'll see:

Hello, Bob!

Troubleshooting

- **Script not running?**
 - Ensure your user has **Programming Rights**.
 - Check the **Script Macro** is enabled in the admin settings.
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Summary

In this lab, you learned how to:

- Use the `{{groovy}}` macro in XWiki.
- Declare and use variables in a Groovy script.
- Display dynamic content in a wiki page.

1. Control Structures (If-Else, Loops)

Learn how to use Groovy control structures to build dynamic logic in your wiki pages.

Example:

```
groovy

def hour = new Date().format("H").toInteger()
if (hour < 12) {
    return "Good morning!"
} else {
    return "Good afternoon!"
}
```

2. Working with XWiki APIs

Start accessing XWiki's powerful Java and Groovy APIs to interact with pages, users, documents, etc.

Example – List All Pages in a Space:

```
groovy

def docs = xwiki.getStore().searchDocuments("where doc.space = 'MySpace'")
return docs.join("<br/>")
```

3. Use Input from Page or User

Access parameters or inputs passed from forms or page variables.

Example:

```
groovy

def name = request.get("name") ?: "Guest"
return "Welcome, ${name}!"
```

4. Create Simple Forms and Process Input

Build forms using XWiki syntax and process form data with Groovy.

Form Example:

```
xwiki

{{html clean="false"}}
<form method="post">
    <input type="text" name="name" />
    <input type="submit" value="Greet Me!" />
```

```
</form>
{{/html} }

{{groovy}}
def name = request.get("name")
if (name) {
    return "Hello, ${name}!"
}
{{/groovy}}
```

5. Modify or Create Wiki Pages Programmatically

Use Groovy to create or update pages dynamically.

Example:

```
groovy

def newDoc = xwiki.getDocument("MySpace.NewPage")
newDoc.setContent("This is a new page created via script.")
xwiki.saveDocument(newDoc)
return "New page created."
```

6. Security Best Practices

Ensure safe scripting:

- Avoid dangerous code execution.
 - Sanitize inputs.
 - Use programming rights responsibly.
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Resources

- XWiki Scripting Guide
- XWiki API Reference