

# Java Web Applications

# Target: Learn Java Web Application development basics

Step 1: Install Netbeans, Apache web server and Glassfish app server

Step 2: Form-based application tutorial

Step 3: Ajax application tutorial

Step 4: jQuery tutorial

Step 5: Reflection

# Step 1: Installation

Netbeans IDE: 8.0.2 or 8.1 (your development environment)

Apache Web server (receives and dispatches http requests and replies)

Glassfish application server (Java environment for the application)

See: <https://netbeans.org/downloads/index.html>

## Step 2: Basic Java Web application

Follow the tutorial at <https://netbeans.org/kb/docs/web/quickstart-webapps.html>

Note: perform the steps in the tutorial yourself manually. Make sure you understand the role and purpose of each component in the application.

Reflection:

1. Explain what happens in the browser when user presses OK button.
2. Explain what happens in the backend side when user presses OK button.
3. Explain how the result of backend processing is delivered back to the browser.

## Step 3: Ajax Java Web application

Follow the tutorial at <https://netbeans.org/kb/docs/web/ajax-quickstart.html>

Note: perform the steps in the tutorial yourself manually. Make sure you understand the role and purpose of each component in the application.

Reflection:

1. Explain the steps that take place when a user types one character in search box.
2. In what way(s) are the client-server communication steps different compared to an application like the one in the first tutorial?

## Step 4: jQuery Ajax Java Web application

Follow the tutorial at <https://netbeans.org/kb/docs/web/js-toolkits-jquery.html>

Note: perform the steps in the tutorial yourself manually.

Reflection:

1. How would you deliver the data shown in the browser dynamically from the server?

## Step 5: Reflection

1. What is a .jsp file? Could you replace .jsp with .html file? Why?
2. What is a bean?
3. What is the role of WEB\_INF folder in your project?
4. What does Ajax stand for? Explain each part of the acronym.
5. What is a servlet?
6. Why is jQuery often used in web applications?
7. In what ways is developing Java Web application different from developing PHP?