1. DVWA

<u>Damn Vulnerable Web App (DVWA)</u> is a **PHP/MySQL** web application that is damn vulnerable.

The app is divided into sections for different types of vulnerabilities. The best thing about DVWA is it has **lessons/guidelines** on how to exploit a vulnerability.

2. Webgoat

<u>WebGoat</u> is a deliberately insecure application that allows you to test vulnerabilities commonly found in **Java-based** applications that use common and popular open source components.

Like DVWA this also has tutorials for each vulnerability.

3. Juice Shop

OWASP <u>Juice Shop</u> is probably the most modern and sophisticated insecure web application! It is written entirely in **JavaScript (Node.js, Express, Angular)**.

Juice shop also has tutorials for several of the easy challenges.

4. Metasploitable

Metasploitable is a vulnerable virtual machine intended for practicing taking over machines. Intended to be practiced with metasploit- the ultimate vulnerability exploitation tool, this vulnerable VM is one of the most enjoyable ones to play with. It has three versions:

- 1. <u>Metasploitable</u>: Released in 2010, this one is quite old. A lot of the vulnerabilities are not valid anymore.
- 2. Metasploitable 2: Released in 2012, this one is more beefed up with vulnerabilities.
- Metasploitable 3: This one is the latest version and the one you should be focusing on.

The difference between versions 2 and 3 is that in metasploitable 3, you will also get to practice on windows environments. Metasploitable 1 and 2 are only Linux based.

5. Security Shepherd

The <u>Security Shepherd</u> Project is a web and mobile application security training platform. This is the only app in this list that can provide a flavor of mobile app pen-testing.

The above apps are the best to get started with and practice penetration testing. However, there are some lesser-known apps that you can also try out to further improve your skills.

6. bWAPP

Buggy web app (bWAPP) is also **PHP/MySQL** web app. It has over 100 vulnerabilities fo you to test.

7. DVNA

<u>Damn Vulnerable Node Application</u> is a lesser-known vulnerable web app. Do this only after you have done Juice Shop.