Capture the Flag (CTF): Cyber Range

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Location: CodeDay Labs

In the world of computers, computer security is extremely important as no one wants their information stolen. Nowadays, hackers are attacking websites non-stop in an attempt to access valuable information ranging from bank passwords to site login information. Developers want to make sure they secure their programs and leave no gaps for hackers, however, many developers lack security experience and when they learn it's too late. A Capture the Flag game, or CTF for short, is a form of gaining experience in information security without having to put your product at risk. The aim of this project is to create a CTF game using Java Spring Boot and React, in which users can practice finding flags which are secrets hidden in the vulnerable site. By doing so, users gain experience in securing a machine, and conducting and reacting to all sorts of cyber attacks. The site we are working on simulates a school management system with two types of users, student and teachers. Students are able to view their grades and enroll into classes, while teachers are able to view students' grades and update student grades. Users then try to access information they are not supposed to be able to access and find the hidden flags. The more flags they find, the higher their score. This type of program helps developers understand the type of attacks they can encounter and teaches them how they can defend against them.

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