Cyber Trainer

User Manual

Introduction

This web app is designed to provide a learning platform for Rafael employees, the main goal is to teach how to write secure code and learn about different vulnerabilities and weaknesses.

User Registration

All the problem solving features the app provides can be accessed after logging in to an account. First of all, to create an account one should go to the ‘Register’ page and fill up the required fields: name, username, a valid email address and a password. It is important to note that each username is unique across all users. After creating an account you can head to the ‘Login’ page in which you can then enter you details which were set up at the registration and log into the account.   
You can see that you are logged in immediately via the home page, if you are logged in with the user name ‘Alex’ then you should get a message that says “Welcome back, Alex”, otherwise Login/Register options will appear.

Problem Solving

Problems Menu

The problems are divided into different programming languages, this can be seen when going to the ‘Problems’ page in which there will appear a list of programming languages to choose from. After clicking a specific language a list of problems will appear, this list is composed of both closed (multiple choice) and open (code) questions. Each question has a name, type, difficulty (easy/medium/hard) and a mark that indicates if you have already solved it (If the question hasn’t been solved then a red ‘X’ will appear, otherwise if it was solved then a green ‘V’ will appear). You can use the filtering options to display only a certain group of questions. For example, if you mark ‘easy’ then only questions with the ‘easy’ difficulty will be displayed.  
When picking a question to solve and clicking it you will be able to try and solve it as discussed in the next paragraph.

Solving a Problem

There are two kinds of problems to solve:  
- Open problems: This is a problem which involves writing code. The problem has a paragraph explaining what the problem is about and what the user should do, this part contains all the instructions required to understand the question. Under the paragraph there will be a text window which contains some code, this code is editable and can be deleted and changed by the user. After modifying the code, you can submit the code for review via the ‘Submit’ button, a loading bar will appear at the bottom of the page and after the code has been checked a feedback message will appear. If the submitted code was correct and the problem was successfully solved then ‘Correct!’ will be displayed in green, if the code didn’t compile correctly then ‘Copilation error’ will be displayed in red and in the case that the code compiled but the solution was not current, the message ‘Wrong Solution!’ will appear in red.   
There is no limit on the number of tries for submitting a question so even if a question has been solved and the user wants to try a different solution he is able to do so.

CLOSED

Profile

The profile can be accessed by tapping ‘Profile’ in the navigation bar. The profie page displays all the information about the user that was given in the registration. In addition, every time the user tries to solve a question, either by submitting code or the number of total attempts displayed