

Ministry Category : Ministry of Electronics and Information
Technology (Meity)

Problem Code : #MTY16

Problem Statement : Lack of Cyber Security Awareness among
Students in technical institutions

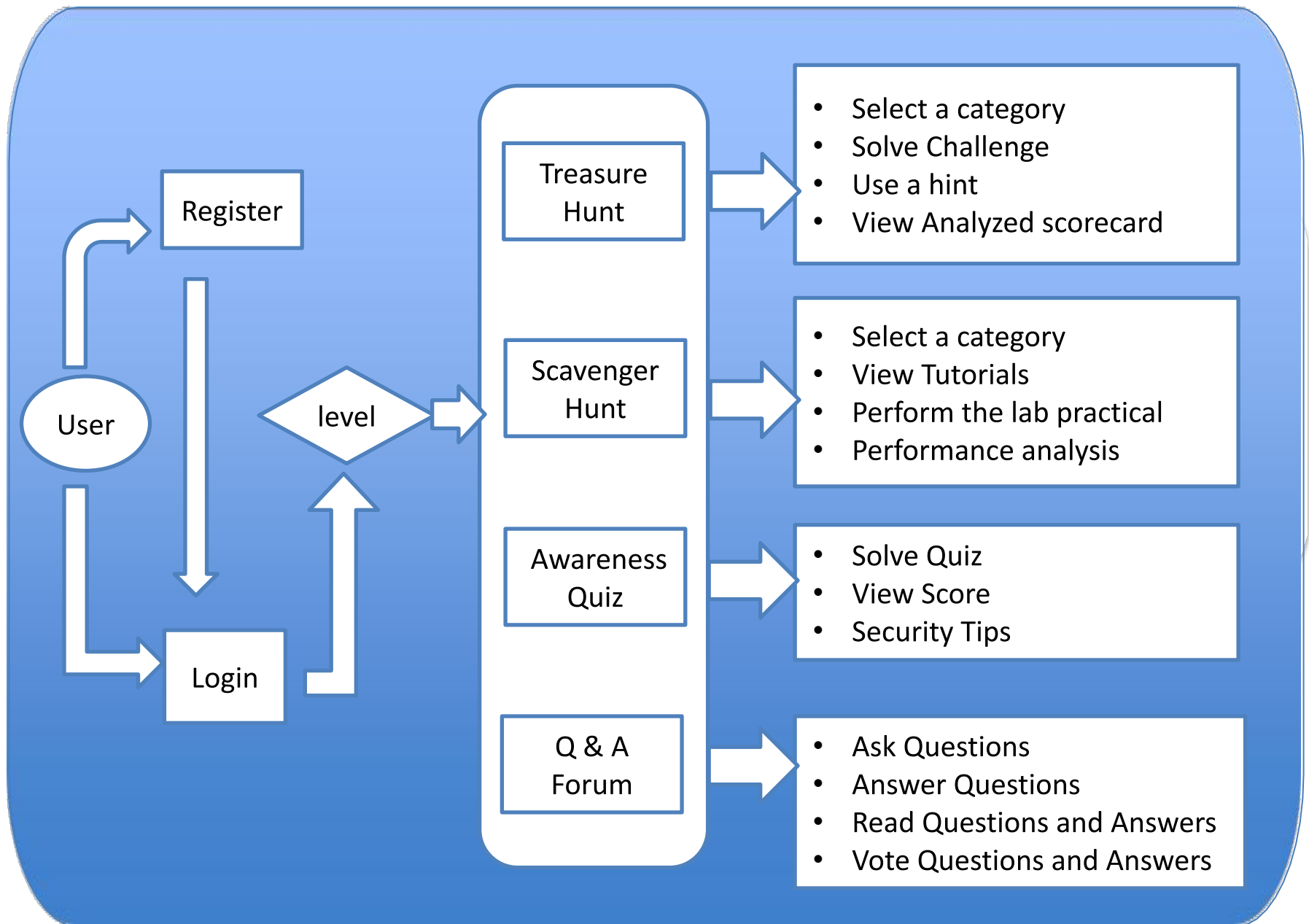
IDEA DESCRIPTION

- We propose to implement a web application which will provide a virtual environment to learn areas of Cyber Security, such as web vulnerability assessment, social engineering, digital forensics, cryptographic analysis, and penetration testing.
- This web application will consists of a Treasure hunt, a Scavenger hunt, a Questions and Answer Forum and an Awareness Quiz.
- Treasure hunt, Scavenger hunt and Awareness Quiz all are divided into 4 levels on the basis of user's maturity. First level is beginner level for non-tech students to develop their interest in the field of cyber security. Second level is intermediate level which is for the technical students who have a little bit knowledge about technology. Third level is expert level which is for IT students. Fourth level is Professional level which is for student who have the responsibility to make India digitally secure.
- Treasure hunt will be a game based environment which will reinforce learning in the area of cyber security. It will consist of 100 plus challenges, each challenge will provide an infosec scenario, a set of objectives, links to various digital assets that user have to use and how to use them to solve each challenge.

- Each challenge solved will take user to the next challenge i.e without solving the previous challenge user cannot move to the next challenge. Treasure hunt will not only aware users for cyber security but teach them how to implement it practically for their betterment in day-to-day life . The challenges will keep them engaged, entertained and enlightened.
- The Scavenger Hunt allows user to learn about different terms ,websites, resources and tools like encryption, phishing, SQL injection, metasploit, nmap, nessus and wireshark, etc related to cyber security. We will provide tutorials in the form of text, images and website links. Each tutorial will have a set of tasks related to these resources which will test their knowledge.
- The Awareness Quiz will consist of many quiz related to cyber security. Each quiz will consist of 15 randomized questions to be solved in 10 minutes. They help user to learn how secure they really are. Afterwards, they get a score, the correct answers, and a chance to retry with different questions.
- The Question and Answer forum where users can ask questions and queries anonymously. Questions are answered by subject matter experts.

Technology Stack

- PHP
- Javascript
- JQuery
- HTML, CSS
- Bootstrap
- MySQL



USE CASE DIAGRAM

Dependencies

- Internet Connection
- Laptops
- Charging Ports
- Dreamweaver
- Xampp