Dear Intern

Project report is an inherent component of your internship. We are enclosing a reference table of content for the project report. Depending on the internship project (IT/Non-IT, Technical/Business Domain), you may choose to include or exclude or rename sections from the table of content mentioned below. You can also add additional sections. The key objective of this report is for you to systemically document the project work done.

|  |  |
| --- | --- |
| Internship Project Title | Create a CAPTCHA Service to Secure a Simple Web-based Application |
| Name of the Company | TCS ion |
| Name of the Industry Mentor | Prof. Rohini Bhosale |
| Name of the Institute | MIT ADT UNIVERSITY -- SCHOOL OF COMPUTING |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Start Date | End Date | Total Effort (hrs.) | Project Environment | Tools used |
| 03/03/2023 | 03/04/2023 | 45 | VS CODE | HTML CSS JS CHROME |

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* Acknowledgements

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* Objective

The main purpose of a CAPTCHA Service to Secure a Simple Web-based Application is to validate authentic users on the website so that there is no negative impact on the website. CAPTCHAs can prevent bots from spamming the review section with fictitious remarks.

* Internship Activities

Step1: Adding some basic HTML Code

Step2: Adding CSS Code

Step3: Adding JavaScript Code

* Approach / Methodology

A captcha is a tool for determining whether or not a user is human. A captcha is made by combining letters and numbers. It demonstrates that the individual trying to use the platform is a legitimate human being. Using HTML, CSS (bootstrap), and JavaScript. we will build a captcha verification in this internship in web application.

You can Secure your website with CAPTCHA validation. Mainly CAPTCHA is used for login forms, registration forms, and contact forms and how can easily implement CAPTCHA with HTML, CSS, and JavaScript.

This project will teach you the basics of bootstrap, which we’ll use to add styling to our Captcha Verification, and JavaScript, which we’ll use to add functionality for matching the images in the captcha Validation.

The project is now finished, we have completed our Captcha using HMTL ,CSS and Javascript. Now look at the live preview.

* Challenges & Opportunities

Advantages:

1. Increase Security.

2. Reduces Spam.

3. Makes online activity safer.

Disadvantages:

1. Fails in the browser.

2. Time-consuming.

3. Sometimes difficult to validate.

* Risk Vs Reward

Not easily accessed or hacked by someone

* Outcome / Conclusion

We have seen that by distinguishing between humans and computers, CAPTCHAs offer protection against automated attacks on systems and applications. The criterion for success of a text-based CAPTCHA are its robustness and usability.

* Enhancement Scope

The security level of CAPTCHA can be enhanced in future by turning it more intellectual and based on artificial intelligence problem which require mental ability to solve the CAPTCHA.

* Link to code and executable file

https://github.com/luharuka/TCS-ION-45-