

A

Project Report

On

**THREE-LEVEL AUTHENTICATION**

*Submitted to*

Department of

**Computer Science and Engineering**

By

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Under the guidance

Of

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**SUMATHI REDDY INSTITUTE OF TECHNOLOGY for WOMEN**

*(Approved by AICTE, New Delhi; Affiliated to JNTU, Hyderabad)*

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*Rajan*

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



### CERTIFICATE

This is to certify that the project entitled “**THREE-LEVEL AUTHENTICATION**” is submitted by GUNDA DEEPTHI(206Y1A0532), CHILUVERI KALYANI(206Y1A0518), KOTA SAI PRIYA(206Y1A0546) and JANAGAMA SWATHI(206Y1A0535) to the department of Computer Science and Engineering during academic year 2022-23.

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## ABSTRACT

In the current state there are many authentication schemes and most of these suffer from many weaknesses. Some of them are based on the physical and behavioral properties of the user, and some others are based on knowledge of the user such as textual and graphical passwords. Furthermore, there are other authentication schemes that are based on tokens, such as smart cards i.e., based on what you have. Among the various authentication schemes, the most commonly used schemes are textual password and token-based schemes, or the combination of both. However, both these authentication schemes are vulnerable to certain attacks. In this paper, we present a 3-level password authentication scheme, which is a multi-factor authentication system. To be authenticated, this project plans to present a 3-level password system by combining the features of the existing authentication schemes. The three different levels used in the 3-level password authentication scheme are image ordering, color pixels and the one-time password (OTP). We use different hash functions such as random for the generation of OTP.



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