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PassGuard: Multilayer Password Generator

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Abstract: Security is a major problem in our daily lives, with data breaches and cyber-attacks becoming more regular. Authentication is one of the most critical security services supplied to the system by various authentication systems. To protect any system, authentication must be established so that only authorized individuals have the authority to use or handle the system and its associated data safely. Keeping this as a main concern, we are developing a multi-level security system that increases password confidentiality to a greater extent. At each session, users must be authenticated in order to progress to the next level. The first level is authenticated using alphanumeric text, the second by color scheme password encryption lock, and the third by OTP creation. After being authorized at all levels, the user can utilize the system. If the user fails to authenticate at any level, he or she will be unable to further. According to the final result evaluation, three-degree authentication provides a more reliable level of safety than current systems

Keywords: Authentication, Security, Confidentiality, Password, OTP generation

