IMPLEMENTATION OF ONE TIME PASSWORD (OTP) FOR LOGIN SECURITY ON WEB-BASED SYSTEMS

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ABSTRACT

The login system is a system that exists on internet access that has important data and information that needs to be kept confidential. So that the login process needs to have security in the authentication process at login in order to maintain the integrity of the data and important information in it. The security system at login becomes very important considering the internet is a public network that is connected to the same network. The absence of security in the login system would be very dangerous to manage. Therefore, a security system is needed that can prevent eavesdropping on the website. From these problems, it is possible to add an authentication process to login using One Time Password (OTP). One Time Password (OTP) is a temporary code that is sent via SMS or Email as a step to strengthen authentication at login. OTP code does not use the same code for every login, if someone manages to record the code that has been used, then that person cannot use the code because it is no longer valid for the session. After the user enters the email and password, the system verifies the user to enter the code sent by phone number or email. In this process the system generates and stores the code into the database, SMS API and PHP Mailer as the sender of the code to the user via SMS and Email. The researcher concludes that login security using One Time Password (OTP) is one mechanism to strengthen the authentication process at login, by utilizing the SMS API and PHP Mailer as code senders.

Keywords: Login, Security, Authentication, One Time Password (OTP)