## DESIGN AND DEVELOPMENT OF CONSTRUCTION SERVICE PROJECT ORDERING INFORMATION SYSTEM AND LOGIN SECURITY USING ONE TIME PASSWORD BASED ON EMAIL WITH MD5 HASH (Case Study: PT. Putra Berkat Mandiri in East Kalimantan)

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## ABSTRACT

PT. Putra Berkat Mandiri is one of the businesses in the economic sector related to a planning or implementation and supervision of a construction activity to form a building. The problem is PT. Putra Berkat Mandiri does not have an information system related to the project ordering process. Their data collection only uses Microsoft Excel because PT. Putra Berkat Mandiri is very worried that making a webbased information system will be misused by unauthorized parties because it can harm the company. The purpose of this final project is to implement login security to access the information system for ordering construction services projects at PT. Putra Berkat Mandiri web-based. The method in the information system is in the form of security using OTP (One Time Password) which is generated with an MD5 hash, then generates a code via email for authentication. The OTP (One Time Password) code sent to the user will be matched with the one stored in the table to check its validity. If it matches the OTP (One Time Password) code sent to the one stored in the table, the user can access the information system at PT. Son of Independent Blessing. The result of the implementation, namely OTP (One Time Password) is applied to the login information system for ordering the construction service project of PT. Putra Berkat Mandiri, so they can keep company data in the information system safe. The OTP (One Time Password) code generated using the MD5 hash is unique, in which 8 attempts have been made to get different OTP (One Time Password) codes. The time for receiving the OTP (One Time Password) code varies depending on the internet speed used. OTP (One Time Password) code is sent via email with a dynamic code (changes) every time the user logs in.

Keywords: Information System, Login Security, OTP (One Time Password), MD5.