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The ideal improvement of Institutional Repositories using Identity Access Management System

Many institutions lack the ideal point of copyright protection for their institution repositories and therefore there is limited access to the sharing of papers, presentations, articles e.t.c. This paper aims to discover and explore the application of Identity Access Management in a tertiary institution setup and to ensure the information security goals are adhered to within the federation. The said platform will offer a chance to readily avail sharing of educational material to peers and a real chance at ground breaking research. As a result, this paper examines the system that enhances the idea of information sharing to further develop countries without any copyright infringements. The main objectives of this research is to create an online journal paper search system that grants access to open access journal articles through an API. To implement automatic downloads of searched papers to local repositories and document compression for all documents over 30MB. To implement a Single Sign-On authentication system. There are two main modules used in this system namely the user module and the authentication module. The user module is in control of the user actions. These actions are login and registration. To trigger this, a person has to type a URL into the browser that takes them to the login or registration interface. Authentication module is responsible for a JSON web token (JWT) creation. A JWT consists of a header which includes the algorithm in use for hashing and token type, payload which contains the claims which are statements about the entity or user and the signature which is created using encoded header and payload, algorithm specified and a secret key(HMACSHA256). The overall expected outcome of this research is to solve the problem of students having to create multiple accounts to access various school resources. The amount of bandwidth used by the same students in search of journal papers can be saved through the use of this efficient research method. In conclusion this research paper enhances the idea of knowledge sharing hub using popular web technologies for all students to benefit greatly from the initiative.

Keywords: *Copyright, Institutional Repositories, Authentication*

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