

Software development for the management of irrigation located in the semi-arid using the evapotranspiration of culture

Leoncio Gonçalves Rodrigues^a, Romulo Pereira da Silva^b, Ana Célia Maia Meireles^c, Carlos Wagner Oliveira^d & Francisca Laudeci Martins Souza^e

Abstract: The semiarid region has an irregular rainfall regime, associated with high evaporation, high temperatures and low precipitation. Due to these characteristics, irrigation is the only means of making crops possible during periods outside the rainy season. Irrigation requires proper management to be sustainable. Management, however, consists of using repetitive and expensive methods that lead to errors that interfere with irrigation. These routines and management processes can be used in software development, which make the task simpler. Given the above, the objective of this research was to develop software that optimizes routines, facilitating management. For

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- a Irrigation and Drainage Technologist. Master's student in Sustainable Regional Development at UFCA – Federal University of Cariri. leonmeid@gmail.com. <http://orcid.org/0000-0002-8770-9172>.
 - b Bachelor of Computer Science. Master's student in Sustainable Regional Development at UFCA – Federal University of Cariri. romulo.almeida@aluno.ufca.edu.br. <http://orcid.org/0000-0002-9671-5451>.
 - c Ph.D. in Civil Engineering. Professor at UFCA – Federal University of Cariri. ana.meireles@ufca.edu.br.
 - d Ph.D. in Biosystems Engineering. Professor at UFCA – Federal University of Cariri. carlos.oliveira@ufca.edu.br.
 - e Ph.D. in Education. Professor at UFCA – Federal University of Cariri. laudecimartins@gmail.com.

this, the languages Java and SQL were used. The development was carried out in the NetBeans 8.2 Software Development Interface, adopting the Model-View-Control standard, the database used was Apache Derby. From the technologies used, and the conduction of the tests of the components and functions, the management software for localized irrigation “Irrigasertão” was obtained as a result. The software developed rational use of water resources.

Keywords: Water. Temperature. Soil. Weather.