

E-Healthcare via Customized Information Services: Addressing the Need for Factually Consistent Information

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Abstract. Web portals provide an efficient gateway to a broad range of E-services, resources and information. Web portals need to evolve towards being *adaptive* in nature, so that the ensuing E-services provided by them are dynamically tailored to meet the diverse needs of its users. This paper explores the use of intelligent techniques, in particular *constraint satisfaction* methods, to develop adaptive E-services that provide customized and factually consistent information to users. We model the generation of customized information content as a constraint satisfaction problem—a solution is derived by (a) satisfying user-model constraints with information document selection constraints; and (b) establishing inter-document consistency when dynamically combining heterogeneous information documents. The work is applied in an *E-Healthcare* setting leading to the generation of personalized healthcare information.