USER-CENTERED TECHNIQUE FOR MANAGING AND TRACKING MODIFICATION REQUESTS IN PROTOTYPE-BASED WEB APPLICATIONS

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\textbf{Abstract}

Nowadays, a lot of development of Web applications use prototyping approach such as throw-away prototyping and evolutionary prototyping. In order to fulfill the users' requirements, developers need to communicate with the users, therefore prototyping is widely used in software development to assist these developers. As we develop Web application and release them as a number of versions or releases of prototype, it constantly requires changes to evolve and meet users' specific requirements. Thus, prototyping approach may cause more maintenance cost to be incurred due to scope creep during software development. In addition, it provides the challenges to a maintenance team who is mostly not the actual development team, to manage and track maintenance process of such Web applications. This paper proposes a user-centered technique for managing and tracking modification requests in a Web application. We anticipate that the proposed technique can assist maintainers to manage and track modification of a Web application in more effective and efficient manner by capturing, classifying and validating the enhancement requests, problem report and modification requests directly from the users during the prototyping process itself. This in turn will avoid unexpected modification requests once we release the Web application and to allow the tracing of both enhancement and problem report during prototyping and modification requests and problem report during maintenance.

\textbf{Keywords}: Software prototyping, Enhancement request, Software maintenance, Modification requests, Prototype-based Web applications