## DYNAMIC AND DIGITAL STYLE GUIDE SYSTEM FOR AGILE ENVIRONMENTS

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## **Abstract**

User Experience (UX) is referred to as a person's perceptions resulting from the use of a product, system or service. It has become a crucial factor in web and software development practices as it determines how well a user could interact with the given system.

Despite its returns on investment and benefits offered, the Agile methodology, an iterative and incremental software development methodology, has found it challenging to integrate and balance the responsibilities of UX design. This results in the absence of important design artefacts, such as Style Guides, documents established to record the design rationales, guidelines and elements that a product should adhere to when developed. This is further eliminated due to Agiles no documentation policy, causing hindrances to design documentations. The purpose and primary aim of this study is to determine whether UX practices are being followed by Agile projects in Sri Lanka in order to evaluate if design documents, such as Style Guides, are being applied in these project environments. Both qualitative and quantitative measures were used to accumulate data on the use of Style Guides in Agile environments and the common challenges faced by Agile UX teams. The results clearly indicate the lack of guide creation in projects due to the limited time constraints and difficulties involved when creating and managing a static design document. Furthermore, the results expressed the lack of time and emphasis that was allocated for UX practices in Agile projects, leading to further complications.

Based on the background, a list of requirements was generated from the surveys carried out. The solution was to provide a web platform where Style Guides could be created using a form-based approach, eliminating manual guide creation. However, the objective was to promote collaborative efforts in design by enabling team, client and designer involvement. The project followed a RUP software development methodology, along with a component-driven and object-oriented architecture to facilitate faster development. The solution was tested against expert and non-expert users where the results gained were positive. While the research carried out was thorough, further studies are required to identify why Agile is unable to collaborate with UX practices.

**Keywords:** User Experience Design, Style Guide, Agile, Design Thinking, User Centered Design