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M.Sc. in Interactive Digital Media

Dissertation Title: Location – Based Design Project: A set of guidelines for the design of Location-Based applications for educational purposes targeting children.

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Abstract

The aim of this research paper is to suggest a set of design guidelines that can help designers, pedagogues and developers to design, build and develop location-based applications, aimed at being used inside as teaching tools during in-class activities. For this purpose, the first step was a cross-analysis between the prevalent pedagogical theories, so that a specific age group could be defined and constitute the basic target group of the research. As a next step, a cross-analysis between the most popular User Interface elements used in location-based and educational applications, as well as between the current evaluation processes takes place, in order to determine specific research parameters such as the most practical and comprehensive User Interface elements that are more appropriate for children, as well as the evaluation process that is to be followed. According to the aforementioned parameters, a set of guidelines will be formed and followed during the redesign of already existing location-based applications to fit the needs of children in an educational concept. These wireframes will be heuristically evaluated so that their utility is tested. During this evaluation process questions regarding their validity will arise and will constitute the basic questionnaire of the interviews with experts in both design and pedagogy, so that any lacks regarding their accuracy can be pointed out. Finally, the set of guidelines will be revised in order to include any corrections stressed during the interview process. It is the aspiration of this research paper to provide a point of reference for developers, designers and future researchers regarding the incorporation of location-based applications in education.