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Stoa: Urban Community-Building Social Experiment through Mixed Reality Game Environment

Authors: Radek Richtr, Petr Pauš

Abstract: Social media nowadays connects people more tightly and intensively than ever, but simultaneously, some sort of social distance, incomprehension, lost of social integrity appears. People can be strongly connected to the person on the other side of the world but unaware of neighbours in the same district or street. The Stoa is a type of application from the "serious games" genre- it is research augmented reality experiment masked as a gaming environment. In the Stoa environment, the player can plant and grow virtual (organic) structure, a Pillar, that represent the whole suburb. Everybody has their own idea of what is an acceptable, admirable or harmful visual intervention in the area they live in; the purpose of this research experiment is to find and/or define residents shared subconscious spirit, genius loci of the Pillars vicinity, where residents live in. The appearance and evolution of Stoa's Pillars reflect the real world as perceived by not only the creator but also by other residents/players, who, with their actions, refine the environment. Squares, parks, patios and streets get their living avatar depictions; investors and urban planners obtain information on the occurrence and level of motivation for reshaping the public space. As the project is in product conceptual design phase, the function is one of its most important factors. Function-based modelling makes design problem modular and structured and thus decompose it into sub-functions or function-cells. Paper discuss the current conceptual model for Stoa project, the using of different organic structure textures and models, user interface design, UX study and project's developing to the final state.

Keywords: augmented reality, urban computing, interaction design, mixed reality, social engineering

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