Enabling Citizen Participation in Urban Planning through Geospatial Gamification

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Abstract : This study explores the use of gamification to promote citizen e-participation in urban planning. The research departs from a case study: the 'Shape Your City' web app designed and programmed by the author and presented as part of the 2021 Dubai Design Week to engage citizens in the co-creation of the future of their city through a gamified experience. The paper documents the design and development methodology of the web app and concludes with the findings of its pilot release. The case study explores the use of mobile interactive mapping, real-time data visualization, augmented reality, and machine learning as tools to enable co-planning. The paper also details the user interface design strategies employed to integrate complex cross-sector e-planning systems and make them accessible to citizens.