

Pengembangan Urban Map Environments Design Dengan Teknologi Augmented Reality (Ar) Sebagai Upaya Inovasi, Transformasi Serta Navigasi Pada *Public Parks Dan Playground* Di Kota Sidoarjo (*Development Of Urban Map Environments Design With Augmented Reality (Ar) Technology Innovation, Transformation And Navigation In Public Parks And Playgrounds In The City Of Sidoarjo*)

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ABSTRACT

Limited access to interactive and centralized information about city parks and Playgrounds in Sidoarjo Regency prevent optimal use of public spaces. This research developed an Augmented Reality (AR) mobile application to improve navigation and exploration. This research aims to design and implement an interactive AR digital map system with Marker Detection and analyze its functionality. The developed application successfully integrates Vuforia and Mapbox to display 29 Points of Interest (POI) on the AR map, enabling user interactions such as map zoom/pan and access to detailed POI information panels. Black box functionality testing on Android devices confirmed that all major test scenarios were successful, indicating that the app works as designed and offers potential as a modern public information tool for Sidoarjo citizens.

Keywords : *Augmented reality, DigitalMap, Navigation, Public Space, Sidoarjo, MDLC, Vuforia, Mapbox..*