

NAVIGATION MESHES APPLICATION FOR NAVIGATION USING ANDROID BASED AUGMENTED REALITY METHOD

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ABSTRACT

University of Technology Yogyakarta (UTY) is one of various private universities in Indonesia with adequate infrastructure, including large and multi-storey buildings. Every year, University of Technology Yogyakarta (UTY) always accepts new students who are ready to take on the world of higher education. New students visiting the UTY campus for the first time often have difficulty finding the room they want to go to. This is because the UTY campus building has a large area, many floors, consists of many rooms, and there are no directional signs. In this digital era, smartphones have become an important part of everyday life, including for new students who have just started college. With the integration of smartphones as an important technology for new students in supporting the teaching and learning process in lectures. This technology can be used as a room navigation aid in UTY campus buildings by utilizing augmented reality technology and navigation meshes. Augmented reality in the navigation system will play a role in displaying 3D images in real time as location points and directions to the destination room and navigation meshes as pathfinding technology to create navigation in a real environment to make it easier for new students to get to the destination room.

Keywords: *Navigation, Smartphone, Augmented Reality, NavMesh, Pathfinding*