

ABSTRACT

Tangerang City has many tourist attractions that are close to each other in terms of access to these places. But few people know the location of these places. Currently, users rarely use applications that provide location search as directions to the desired location. However, the app can only display formless information (images or text), and doesn't judge the actual state of the place. This study applies augmented reality technology using GPS-based tracking technology that can form the coordinates of route points into markers to display virtual objects, therefore the explanation of the directions for the location that will be displayed looks easier and more real to the users. Mapbox is used as a location service provider platform as well as a framework for designing augmented reality. The information shown is in the form of a 2D object in the form of blue arrows and is combined with one another, so that it can produce a direction to the position and is perfectly on the road. To display virtual directions objects properly and correctly according to the user's view, it is recommended to use the application on the left just above using a markerless detection distance of five meters calculated from the middle of the road.

Keywords: directions, tourist attractions in the city of Tangerang, augmented reality, markerless, GPS based tracking, Mapbox