

Technologies and Tools for Implementing a Mobile Pharmacy: A Review

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Abstract. In society today, the use of mobile phones and the development of mobile applications have evolved vastly. Mobile application services have made the lives of people more efficient and thus they have now become a part of the daily routine of people. Yet again, people still have to visit several pharmacies to find the prescribed drugs if they are rare to find, or unavailable in some pharmacies. This has become a huge issue for old people and those who face difficulties in travelling. And especially during this pandemic situation where minimum physical interactions should be maintained; it is a risk to visit several places just to find a particular drug. It would be much efficient and effective both in time and energy-wise if there was an application to locate the nearby pharmacies where the prescribed medicines are available. A mobile pharmacy application is proposed as a solution to these problematic situations, that people face daily. The aim of this study is to identify the suitable tools and technologies to develop this proposed system. Since the proposed application contains the major functionalities of scanning the doctor's prescription to identify the drugs and locating the pharmacies in which they are available; this study is mainly carried out considering the main two features related to those functionalities: handwriting recognition, geolocation positioning and navigation. Through the comprehensive literature review that was carried out it was identified that the IAM dataset, CNN model together with the OCR technique is more suitable to implement medical handwriting recognition. On the other hand, Google Maps API was identified as suitable to be used for geolocation positioning of nearby pharmacies. These technologies would enhance the accuracy of the final output generated through the system while making it more useable for the users.

Keywords: *Geolocation Positioning, Handwriting Recognition, Technologies, Tools*