Chapter 3
Location-Based Internationalization and Localization With Mobile Computing

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ABSTRACT

The Android system operates on many smartphones in many locales. Websites and web tools have their own requirements in day-to-day life. To reach the maximum users, the app and website should handle all the resources such as text strings, functions, layouts, graphics, and any other static data that the app/website needs. It requires internationalization and localization of the website and app to support multiple languages. The basic idea of this chapter is to present an approach for localizing the Android application according to the location data that the app received from the device, but many users do not allow the "access location" feature so this approach will be a dead end in this case. The authors have proposed some other techniques to achieve this feature of localization and internationalization by implementing the "choose language" service so that the app can itself optimize its content and translate it into the user's native language.

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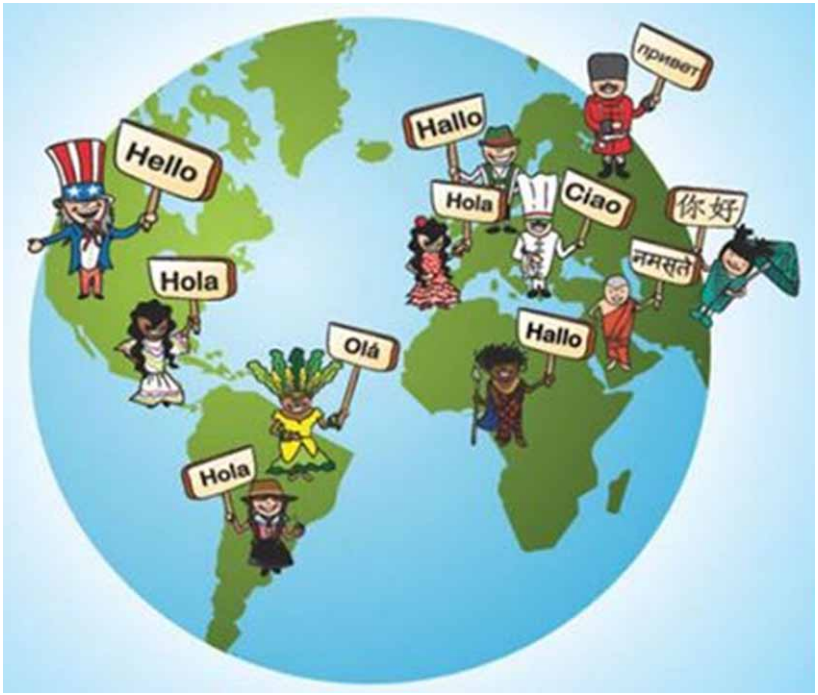
1. INTRODUCTION

Mobile applications and web tools play an integral part in our everyday life. The mobile application development has rapidly increased in the past few years (Awwad, 2017). In order to compete in global markets, the development companies need to deploy world-ready products. If an app is going to be released or a web site is going to be hosted in various countries or regions, it should support the native language and the languages of the target market. This can be done by internationalization and localization of the application and web site/web tool (Awwad & Slany, 2016). There are many contents and information on the internet which is really helpful but due to language many people cannot access it and the information doesn't help them at all. So, the feature of "choose language" in localization and internationalization would be fruitful. The interaction between user and software or the web content will be improved by localization and internationalization. The cultural graphical content can also help users to understand the content because user finds the application or the web content more familiar if the user interface is related to their culture or region. This will also increase the user experience. Fig.1 illustrates 'Hello' in different languages at different location.

Figure 1. 'Hello' in different languages at different location (Ma, 2018)



The steps involved in internationalization and localization are very crucial in deploying the apps and websites to various countries of the world. Users feel more comfortable if the content talks to them in their native language and shows their cultural values. Every region has its own native language, customs and tradition as India is a land of tradition and customs so, does the other countries are. The revenue and downloads will increase if this feature is implemented but due to privacy many of the users refuse to