Abstract

Every day a Smartphone user may look for a new application dedicated for his need. Android makes it easier for consumers to get and use new content and applications on their Smart phones. This paper presents an extremely on-demand, fast and user friendly Android Application ATMA. ATMA stands for Android Travel Mate Application. This application is useful for native Tourists and Travelers who possess Android Smart phones. It enables Travelers and Tourists to easily capture the native country language Books pages, signboards, banners and hotel menus etc. The built-in OCR converts the text embedded in the captured image into Unicode text format. It also provides translation facility so that Tourists can translate the Native Language Unicode text into their own country language. This Application has an advanced search feature so that recognized as well as translated text can be used to copy, paste, share and search for travel related queries like museums, places, restaurants, books, culture, hotels, etc. There is no remote computing overhead because the application has built in OCR suite as well as Image Processing suite both installed in the Android device. It provides fast, robust and extremely high Quality performance because of having improved Auto focus behavior, continuous dynamic preview and improved noise tolerance feature.
References

- Smith, R. "An Overview of the Tesseract OCR" in proc. ICDAR 2007, Curitiba, Paraná, Brazil.
- Tesseract OCR training data downloads. Available at: http://code.google.com/p/tesseract-ocr/downloads/list
- Simple Android Photo Capture. Available at: http://labs.makemachine.net/2010/03/simple-android-photo-capture/
- Microsoft Translator Java API. Available at: http://code.google.com/p/microsoft-translator-java-api
- Tesseract-OCR An OCR Engine that was developed at HP Labs between 1985 and 1995...and now at Google. Available at: http://code.google.com/p/tesseract-ocr/wiki/TrainingTesseract3
- Download the Android SDK. Available at: http://developer.android.com/sdk/
- A fork of Tesseract Tools for Android. Available at: https://github.com/rmtheis/tess-two

Index Terms

Computer Science Information Systems
Keywords

Android  Tesseract OCR engine  Bing Translator API  Shirekha Chopping
Tesseract Android Tools

Android SDK

Android NDK

Tess-two

Eclipse

ADT plug in