A Multi-lingual, Crowd-sourced, and Open Voice Platform that enables Voice-based Applications

World Internet Usage

Although the World Wide Web Foundation envisions a world in which every person can have access to the Web, still many Internet-less people live in developing countries.

Availability of Mobile Telephony is a promising point to supply information

Problems

- Accessing information is not possible for many people around the world because:
  - Lack of Internet equipment and infrastructure
  - Most information is only available in common languages
  - Many people are not comfortable with textual information
  - Some people are illiterate
  - Some just don’t like to read
  - Face-to-face contact is primary means of communication

Experiences

- Based on the wide availability of mobile phones, many projects have focused on catering people with voice-based services.
  - How to help their growth?
    - Non textual interface:
      - Voice-based Interface
    - Different languages and dialects, especially UNCOMMON languages
    - Different domains: healthcare, market information, weather forecast

Proposed Solution

Availability of broad collection of spoken voice fragments in multiple languages and domains

Volunteers

They are the major community whose practice makes the fundamental of the voice based platform.

To ease their process of collecting voice fragments, an application should be designed.

To motivate potential volunteers to contribute, the app gives scores to the volunteers and enables them to compete with other volunteers.

Usage in voice applications

A weather forecast voice application that uses the voice fragments in the platform:

Uttered words in weather forecast domain in English

Weather Today: Sunny

Temperature: min 15 max 21

Sunny

Humidity: 40 percent

Chance of rain: 10 percent

Weather Tomorrow: Partly Cloudy

Temperature: min 11 max 19

Partly cloudy

Humidity: 55 percent

Weather forecast voice application concatenates the uttered words in the platform

Conceptual Model of the Voice application

With the crowdsourcing approach, we can potentially collect voice fragments in all languages, provided for free by volunteers to be used in voice-based apps.

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