Abstract

Voice based web access is a rapidly developing technology. PhoNET is a solution for these and many other problems faced by the netizens. The basic idea is that using an ordinary phone to browse the web and the primary motivations are: to provide a widely available means for creating new interactive voice applications; addressing needs for mobility; and addressing issues inaccessibility. Basis of the idea are the age old IVR systems used to serve information for the dialers through a pre programmed process. Phonet is a very long journey from the IVRs; it involves the most complex technologies of the century Like Speech Recognition (SR), Text to speech (TTS) conversion and artificial intelligence (AI). This enables a user to be connected to internet as long as he has access to a phone. PhoNET uses the traditional HTML content so the web site need not be rewritten or redesigned. We present a detailed analysis in the most possible simplest way of how the technologies like SR, TTS and AI
are integrated to develop a intelligent Platform (phoNET) to achieve voice based web access which involves Document processing and Document Rendering. In Document Processing we describe two approaches, telephone browsing and transcoding, focusing mostly on the former since that work is more mature. In Document Rendering we present the major problem i.e., the relevance of cognitive thought to text rendering along with its most suitable solution. In the end we examine the challenges and further developments involved in practical application of the proposed technology-The phoNET.

Reference

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Index Terms

Computer Science

Key words

PhoNET
netizens

Speech Recognition (SR)

Text to speech (TTS)

artificial intelligence (AI)