Abstract

Websites are accessible only through devices equipped with a screen and a Graphical User Interface (GUI). This requires physical interaction with devices. We present a system which allows browsing the Internet by using a standard voice only, with the development of a Vocal User Interface (VUI). The system accepts vocal commands as input from the user, translates those commands into HTTP requests, sends them to the web server which processes it and finally returns the HTTP response translated back to the user in a vocally manner. To reach this goal the system implements Content Extraction (CE) algorithms over web content in order to analyze, classify and return relevant parts of web pages to the user. The Microsoft speech SDK allows applets transmitted over the Internet or intranets to access speech capabilities on the user’s machine. This provides the ability to enhance World Wide Web sites with
speech and support new ways of browsing. Speech recognition can be used to control browsers, fill out forms, control applets and enhance the WWW/Internet experience in many other ways. Speech synthesis can be used to bring web pages alive, inform users of the progress of applets, and dramatically improve browsing time by reducing the amount of audio sent across the Internet. Its applications are numerous: for example helping the blind access the internet through speech and hearing, helping disabled people or young children unable to use a keyboard to "speak" their commands into the web, or, simply enabling any person to interface the web contents via oral commands, instead of a keyboard.

References

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Index Terms

Computer Science

Software Engineering

Keywords
Content extraction  Voice reorganization