Ok Eclipse
Augmenting User Experience in IDE using voice

LISTENING MENUS

Navigation to deep menu options is diificult and listening menus provides an easier way to do this.

LOUD CONSOLE

Searching for solutions to Errors and Exceptions in a piece of code requires the programmer to search online. Loud Console automates this task with a single voice command that presents the recommendations from online Q&A repositories within Eclipse IDE itself.

SOUND PROGRAMMER

Writing common-place and repetitive pieces of code has now been made easy with Sound Programmer. For some of the most common pieces of code invoke dedicated voice commands. Or in cases where you want to import accepted code logic just invoke the inject code voice command.

NCSU Software Engineering Project 2018
ok eclipse
voice enabled IDE

Highlights

- Identifies the most irksome problems faced by a coder and provides automated solutions enabled through voice.

- Quick and easy installation process through plugin based installation. Eclipse plugin development has been used.

- Open Source Project hosted on GitHub with easy access for developing code for enhancements.

- Self-explanatory and easy to use software with personalizable commands.

About

As voice based assistants become ubiquitous in our every day interactions with machines, the programming development environment curiously hasn't reaped the benefits from this paradigm. Ok Eclipse is a modest effort at our idea of a voice enabled development platform.

Based on the Open-Source CMU Sphinx Speech Recognition libraries, the Ok Eclipse software provides features such as Listening Menus, Loud Console and Sound Programmer that augment user experience in working in an Integrated Development Environment.

Technology

CMU Sphinx Voice Recognition library, Java, Eclipse Plugin Development, Stackoverflow, HTML, CSS

Based on previous research studies it has been realized that coding using voice doesn't improve productivity. However, the programmer has several other tasks such as searching and executing menu options, debugging errors, etc. that actually become hurdles. Ok Eclipse overcomes these hurdles by making coding a hassle free process.

Challenges involved were mining for Eclipse command IDs, performance and latency improvement using constrained dictionary and phonetically disparate keywords.

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Voice-enabled IDE
tiny.cc/okeclipse

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