Say Hi to Eliza
An Embodied Conversational Agent on the Web
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MOTIVATION
- Web-based Embodied Conversational Agents (ECAs) are accessible from any device via the web browser and internet connection, without any installation required besides the web browser itself and irrespective of the operating system, hence broadening their use in society.
- Web technologies nowadays permit to create and support ECAs with relatively little effort, without the need of installing extra plugins like Adobe Flash or Unity Web Player.
- Large user studies with web-based ECAs can be done easily as only a web link to the application is needed to run it.
- ECAs can be significant when simulating ecologically valid environments for hearing aid research.

COMPONENTS
- Listening and Speaking: Web Speech API for STT and TTS using Google Chrome’s services.

ARCHITECTURE

RESULTS
Each component was tested over 100 interactions with a PC (Windows 8 x64 2.50 GHz, Nvidia GeForce GT 750M) with Google Chrome and a internet connection of 45 Mbps. The total processing time of an interaction with the system (when the subject stops to speak to when the agent starts to speak) had a mean of 392.66ms with a standard deviation of 254.09ms. Thus, the waiting time to get a reply would be less than a second, an acceptable delay in a natural human conversation.

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WEB LINK
https://webglstudio.org/gerard/eliza/

REFERENCES