

AMANDA: A SPEECHWEB APPLICATION ABOUT MUSCLES

Application Category

Developer Information

Name	Shawn Daichendt
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Education level when created the application	1 st year undergraduate student
Institution	University Of Windsor

Application Information

Application Name	Amanda
Date created	July 2008
Link to the application	http://cs.uwindsor.ca/~daichen/amanda/amanda.xml
Link to the code (optional)	http://cs.uwindsor.ca/~daichen/amanda/Amanda.java
Link to the grammar (optional)	http://cs.uwindsor.ca/~daichen/amanda/amanda.jsgf
What is the application about?	Amanda can answer questions about the origins, insertions, actions, blood supply and nerve supply about the muscles of the human body.
Why was the application created?	Amanda was created to show the ease of use of the SpeechWeb architecture in making a SpeechWeb application quickly and easily.
How was the application created?	Amanda was created by using the manual on how to create SpeechWeb applications available on the SpeechWeb developers' webpage.
What is the programming language used?	Java, An object-oriented programming language
How does the application work?	Amanda accepts an input from the user; the input is in a question form. The application parses the question and extracts the keywords such as origin, insertion, action, etc. and the name of the muscle, and then searches for the info in a database containing the information needed.
What is good about the application?	Amanda is an easily expandable program, in that if a new muscle is to be added to the program, someone can simply add the name of the muscle to the grammar and the required info to the database (with little to no programming knowledge required). Amanda also tries to be a very user friendly application.
Problems faced while creating the application and solutions	Amanda begins to become ambiguous when more and more muscles are added to the database. As well, some muscles are not always pronounced correctly by the application, which means they are not identified if the user tries to pronounce it in the correct manner.
How can other developers create a similar application?	Developers can create a similar application by looking up the code and learning the techniques used to parse the questions and returning the appropriate answers. Developers can also use the manuals on the SpeechWeb developers' webpage.
Other comments	The developers' webpage is at: http://cs.uwindsor.ca/~speechweb/developers.html Suggestions and questions can be forwarded to my email