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First Aid Overview

The First Aid application is meant to help users address and potentially treat injuries they encounter. The application covers about 10 different injuries. The application opens by prompting the user about which injury they need help with. In order to get the list of possible options, the user just needs to ask "What can I say?".

Currently the only fully implemented option is CPR. The user can say they need help with CPR or administering CPR and the system will guide the user through the steps of CPR. It starts off with telling the user to lay the person down a firm, flat surface, then moves into instructions on how to do chest compressions and rescue breaths and then enters into a cycle alternating between the two until the user tells it to stop. If the user asks Alexa to stop the cycle, she first confirms before stopping. At any point the user can restart the cycle at either chest compressions or rescue breaths. The user can also ask the system what the available commands are at any time.

For the other injury options, the application just tell the user to call 911 as a general response. For the choking option, the application also prompts the user to say if the injured person is conscious or unconscious.

Once the user decides to end the session, they can say one of a variation of "end first aid" commands and the application will terminate with "Good bye".

For example, with high-level options:

Utterance: I need first aid
Alexa Response: First Aid here. What can I help you with?
Utterance: someone is having a stroke
Alexa Response: Call 911

Utterance: first aid
Alexa Response: First Aid here. What can I help you with?
Utterance: someone got a spinal injury
Alexa Response: Call 911

Utterance: open first aid
Alexa Response: First Aid here. What can I help you with?
Utterance: they're injured
Alexa Response: Call 911

Utterance: open first aid
Alexa Response: First Aid here. What can I help you with?
Utterance: I need help with choking
Alexa Response: Call 911

With the CPR cycle:

Utterance: open first aid

Alexa Response: First Aid here. What can I help you with?
Utterance: cpr
Alexa Response: Lay the person on a firm, flat surface. You will give 30 chest compressions. Push hard and fast in the middle of the chest at least 2 inches deep and at least 100 compressions per minute. When you are ready to begin, say 'ready', and when you are done with 30 compressions, say 'done'
Utterance: ready
Alexa Response: Begin chest compressions. I will count at a rate of 100 compressions per minute. (Alexa says "down and up" at a rate of 100 compressions per minute to help user)
Utterance: done
Alexa Response: Now give two rescue breaths. Tilt the head back and lift the chin up. Pinch the nose shut, then make a complete seal over the person's mouth. Blow in for about 1 second to make the chest clearly rise. Give rescue breaths, one after the other. When you are done with rescue breaths, say 'done'.
Utterance: done
Alexa Response: Now we will return to a cycle of chest compressions, then rescue breaths. Say 'stop' when you want the cycle to stop.
Utterance: ready
Alexa Response: Begin chest compressions
Utterance: stop
Alexa Response: Are you sure you want to stop?
Utterance: yes
Alexa Response: Ending CPR cycle

Note: During the chest compressions and rescue breaths, Alexa says "down and up" at a rate of 100 compressions per minute. Had the user not asked Alexa to stop, she would have continued alternating between "Begin chest compressions" and "Begin rescue breaths".