**Speech to Code**

**State Diagram\ High over view of modules**

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1 2 3

4

Listener:

* Receives command to start listening
* Detects end of voice input
* Converts raw sound into text
* Passes raw strings into interpreter

Interpreter:

* Interprets the raw strings
* Maps the strings to symbols and commands using regular expressions
* Out puts the symbols into strings
* Passes the new strings into the translator

Translator:

* Receive input from interpreter
* Parse it for proper Java format or commands
* Check for erroneous code or commands
* Format code for code writer
* Pass new code to Code writer

Code Writer:

* Simulate Keyboard presses
* Update user on failure
* Return back to listening state.

1. Transitions if it receives a non-empty string. Otherwise return to listening
2. Unconditional transitions
3. Unconditional transitions
4. Transitions to code writer if parse is unsuccessful or code is unusable, or command is incorrect
5. Transitions back to listening if successful output was written or command was used.