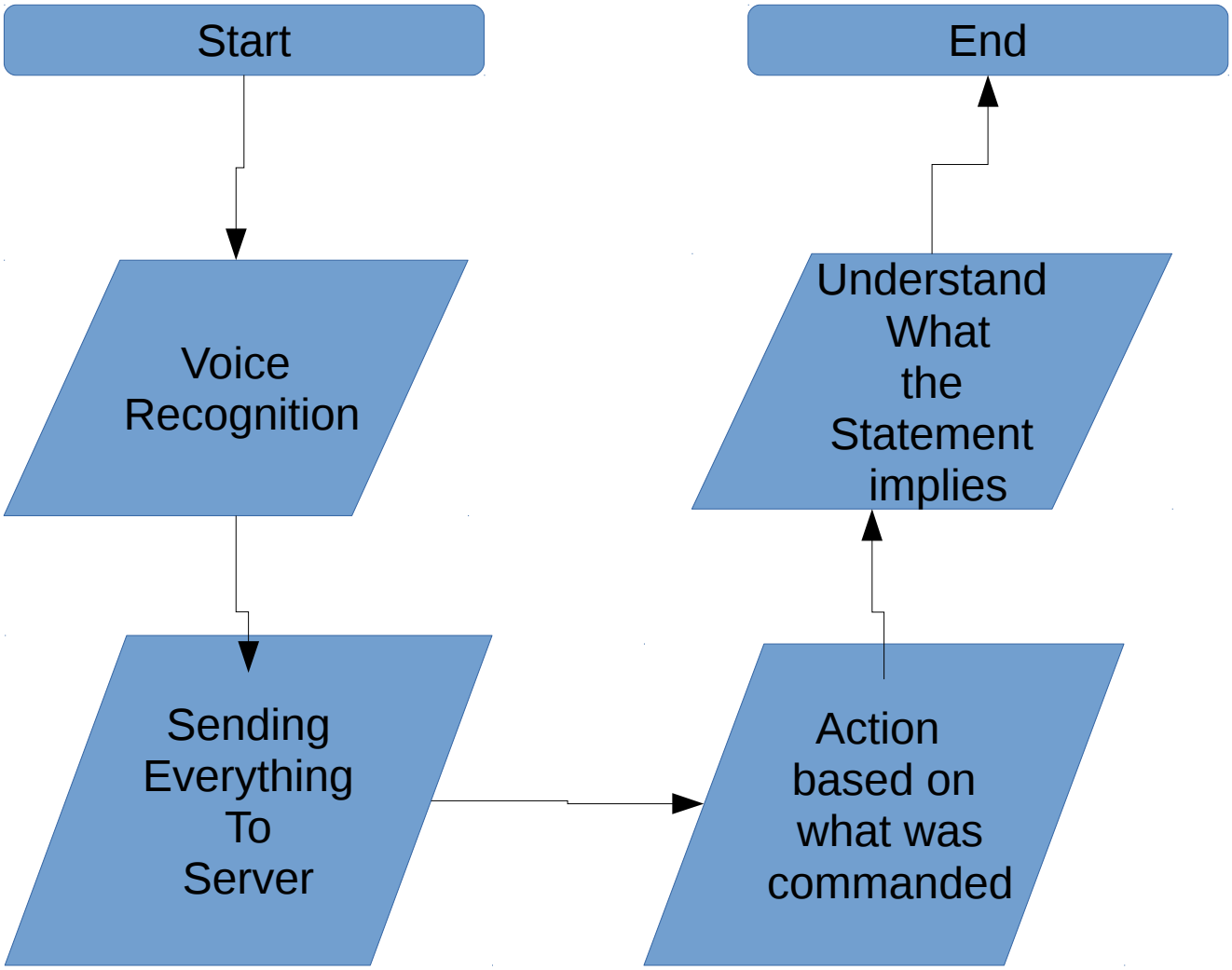
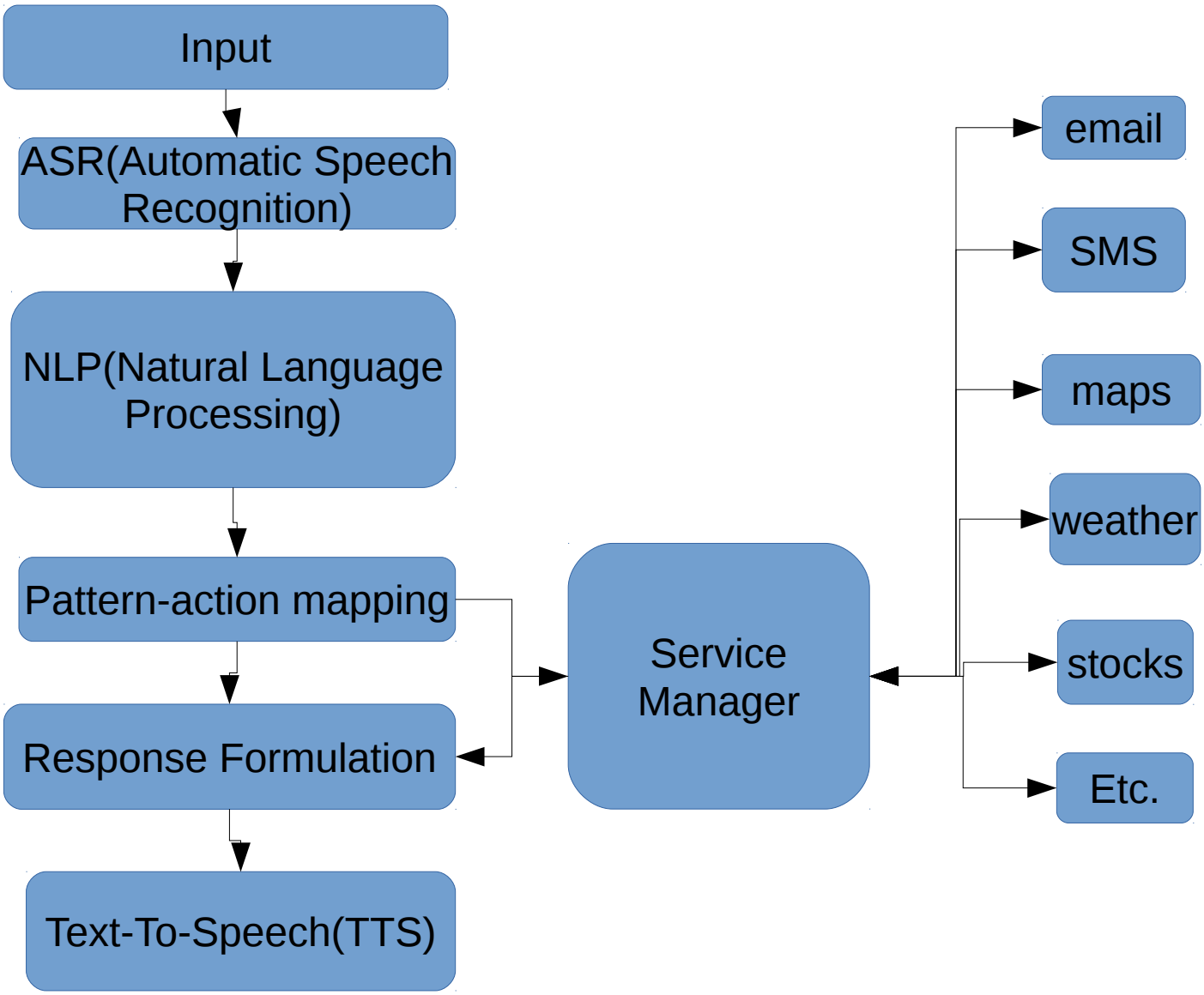
AN GENERAL OVERVIEW OF HOW SIRI WORKS



There Is an Automatic Speech Recognition (ASR) System, Whenever a person commands through his analog signal get converted to digital one and then ‘understand’ what was being said after concatenating the keywords altogether, and finally fixing/obeying the issue/command. In order To rocognize the voice of the speaker it not a trivial thing to achieve it has to overcome the hurdle of country wise accents of different persons, surrounding noises , etc. to make it work which is by no mean an easy task. The ASR that apple siri uses is 95% accurate and has very less error rate.

TECHNICAL FLOW CHART OF HOW SIRI WORKS



Siri does not work locally on a mobile device and eats its limited resources, but rather loads everything to the powerful computer servers so as to extend the maximum efficiency and continuously improvise. There is an algorithm that identifies the keywords and go down towards the flowchart branches (conceptually Tree data structure) that best match those keywords, so as to reach out to meaningful conclusions. If it fails, it searches for another branch. If it fails here too, it asks whether the user wants results from the Web. It hasn't reached to the point of conversational App but has numerous conditional statements in its coding that respond according to the user's action.

In above Diagram An Input to ASR is provided in form of the voice which convert my analog to digital conversion and perform further processing on it. The output from ASR is an input to NLP and pattern-action mapping which work together to get me the appropriate response to my Query(A form of Voice Signal) with the help of the service manager which in turn interact with my API's and search for the appropriate response which are managed in the form of a conceptually Tree data structure.They look down the tree to get me the correct answer(which is Text). This text is than pass

as an input to TTS(Test-to-Speech) block which is a response(another voice signal) to my query this time given by Siri.