"Cortana is an intelligent personal assistant created by Microsoft" (wikipedia.org). Similar to Apple's Siri, Cortana, as being a Windows build-in software, interacts with users in both voice and text content. It assists users in different ways, for instance, manipulating applications, searching information through search engine and having daily conversation with users. Cortana is available in different languages, including English, French and Spanish (wikipedia.org).

The task environment of Cortana is fully observable (sensors are audio receiver and search bar; search bar is fully observable; if there is noise for audio input, the software will give suggestion or conduct different actions instead of making prediction, which, in my opinion, it means that the software will not “allow” the case of partially observable), cooperative multi-agent (there is at least one other object (search engine) that is assisting Cortana by providing search function to help it to achieving its goal), stochastic (the next state of the environment depends on users command and it is unpredictable; it does not depend on current action), sequential (Cortana could actually learn by interactions, memorize old input patterns and make adjustments to its future interaction and respond; it means that the “current decision could affect all future decisions”(p.44)) , static (once a command is made, Cortana would focus on responding the current command; it would not “keep looking around the world”(p.44)) and continuous (since Cortana’s task depends on users command, the task environment does not seem to have a finite number of states. In my opinion, even though manipulating applications can be counted as finite states, when the software make connection with search engine, the searching content is not computable).

I believe goal-based agent is most likely involved in its implementation. Cortana’s main function is to provide assistance and serve users need. Users’ command leads to Cortana’s goal information, and all the actions are patterned to achieve the “desirable situation”. For instance, user enters a command that ask for today’s weather. It forms Cortana’s goal information, which is to find today’s weather. Cortana then take series of actions and display today’s weather on the screen (achieve goal).

https://en.wikipedia.org/wiki/Cortana (software)