

NavigatewidMe

AN END TO END AUTOMATED BOT WHICH NAVIGATES AND ASSIST THE PASSENGERS DURING THEIR FLIGHT JOURNEY FROM THE SOURCE TO DESTINATION BY USING THE AUTOMATED MICROSOFT AZURE SERVICES.

Automation is the key to solve the problem once and putting it on autopilot!



- SORNAM THIYAGARAJAN

Why NavigatewidMe ?

A boon solution to the passenger to save the time and reduce the iterative process by automating the complete procedure in booking flight tickets to arriving destination using the features of *Microsoft Azure service* by incorporating the automation technique.

How Automation works in NavigatewidMe ?

In the fast-moving world, Automation plays a vital role in reducing the human intervention to a minimum. With the automation of developing *NavigatewidMe* has major key aspects in improving operational efficiency ,quality results and increases the passenger satisfaction with *NavigatewidMe* automated bot service. This can be achieved through the various features available in *Microsoft Azure Service*. With this tremendous features, *NavigatewidMe* helps the passenger in booking flight ticket from the source to arriving the destination , bot will engage the passenger with proper guidance,instructions,suggestions, commands, directions ,etc. The major key aspect of *NavigatewidMe* is to take care of the passenger until, they reach their destination with safe. All these can be put into auto-pilot mode to reduce the manual process during the iteration .

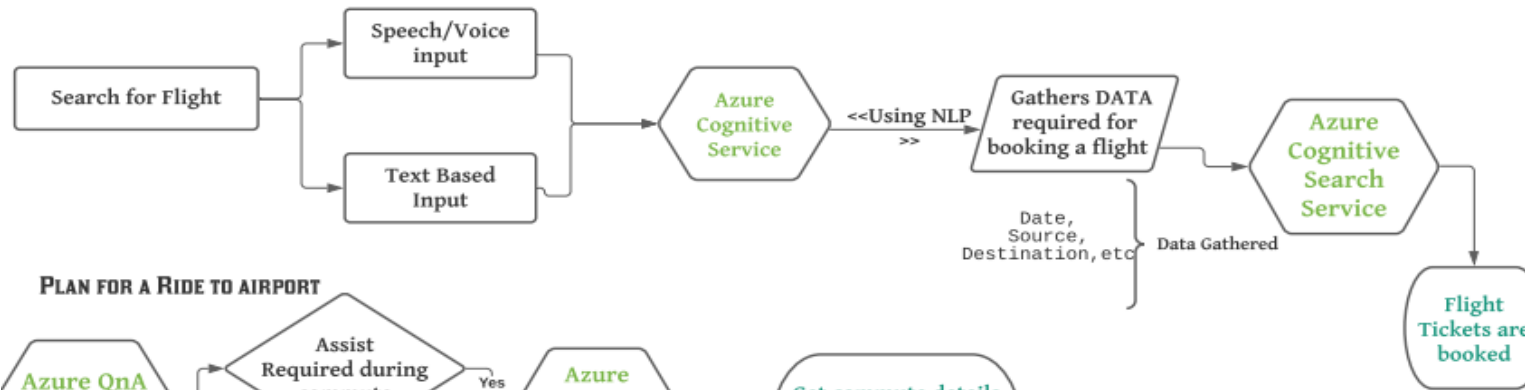


Microsoft Azure Features in NavigatewidMe

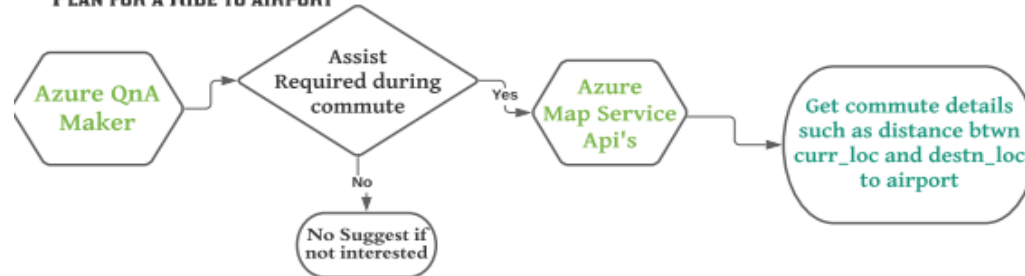
- Microsoft Azure “Speech to Text”
- Microsoft Azure “Cognitive Search”
- Microsoft Azure “QnA Maker”
- Microsoft Azure “Map Service API’s”
- Microsoft Azure “Communication Service API’s
- Microsoft Azure “IOT Hub”
- Microsoft Azure “Computer Vision”

Auto-Flight Booking

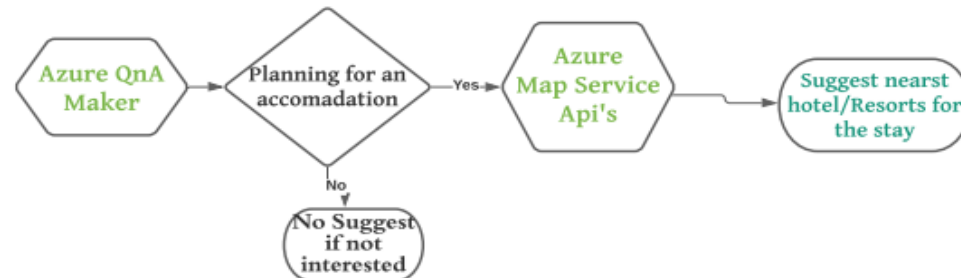
AUTO-BOOKING FLIGHT TICKETS



PLAN FOR A RIDE TO AIRPORT



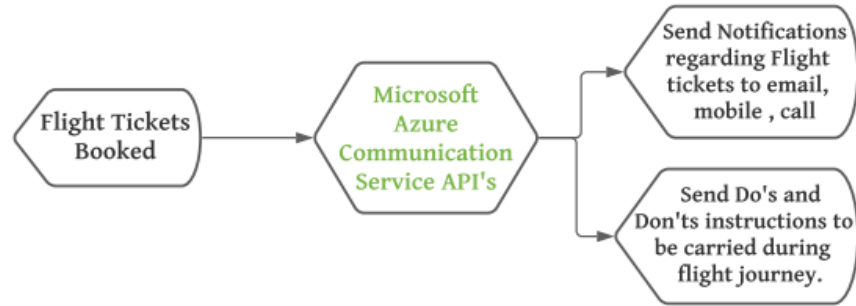
PLAN FOR A STAY IN THE DESTINATION



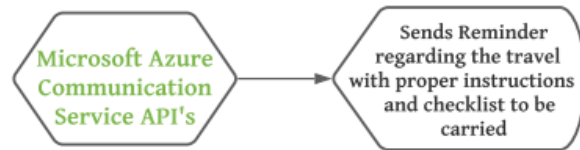
NavigatewidMe helps the passenger in booking a flight ticket by just from their voice based input(which might be in their **native language** also). With that voice as a input using *Microsoft Azure cognitive service*(includes speech to text, text to speech, speech translation, speaker recognition) collects the required data via NLP for booking a ticket, once search is completed , it will go to auto-payment mode and reserves the ticket and send as a notification. After successful booking of tickets , Using *Microsoft Azure QnA maker* bot asks for set of questions for reaching the airport and accommodation in the destination . If prompted with “Yes” bot suggest the passengers with great choices. In addition to that , bot involves and identifying the preference based booking such as flight fare, seat preference, time preference.(all these can be made into auto-pilot mode with one-time input).Hence the process are completely automated .

Auto-Assist in Arrangements

ASSIST AFTER BOOKING TICKETS



BEFORE THE DAY OF TRAVEL

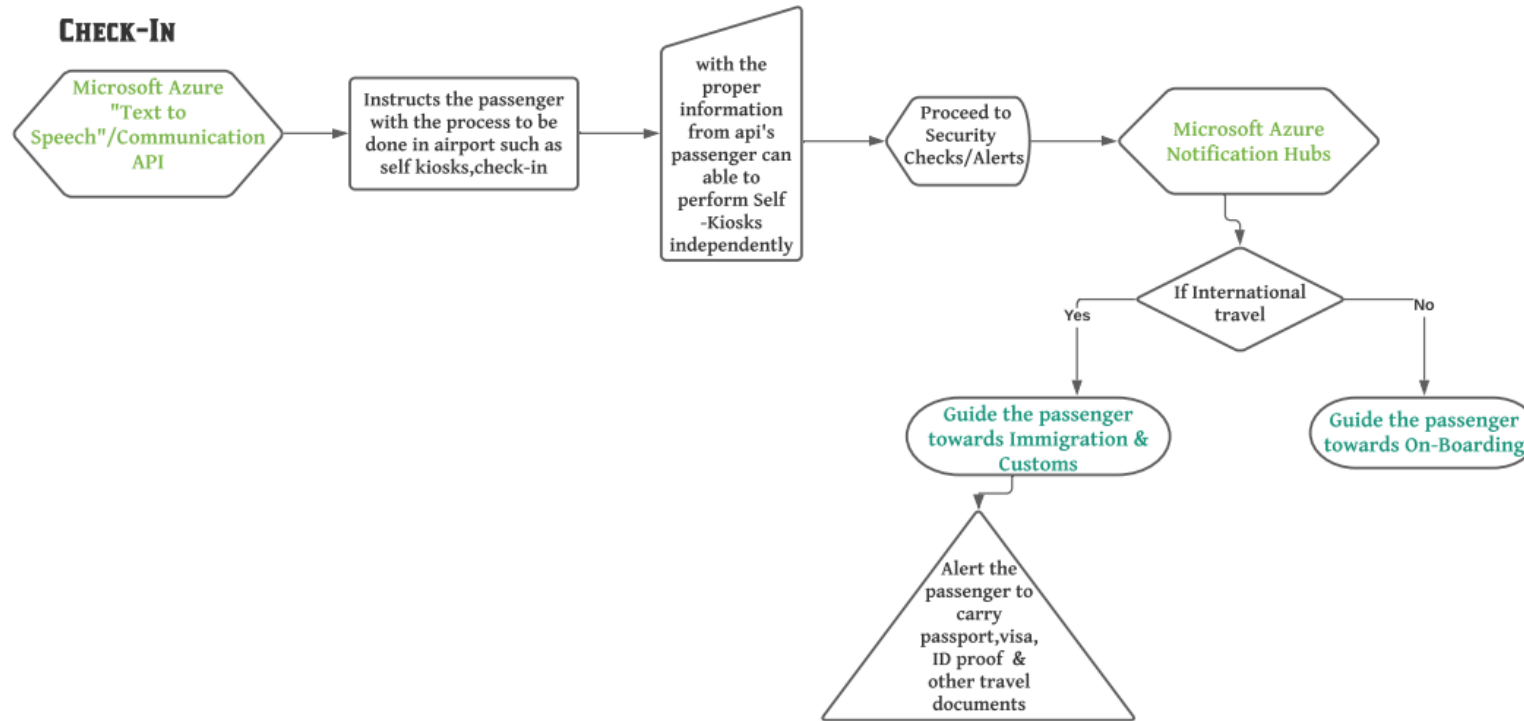


ON THE DAY OF TRAVEL



NavigatewidMe helps the passenger in auto-assisting during the arrival on airport once the booking is confirmed. Once the tickets are reserved using **Microsoft Azure Communication API's**, bot sends the required information/notify to the passenger regarding their travel. So that the passenger can take the necessary actions and preparation during their journey. In addition to that during the COVID pandemic bot will automatically diagnose the health conditions through **Aarogya-Setu** and provide set of instructions regarding health condition, precautions to be carried out during their complete journey and arrival on destination. From the date booked to the date of journey bot automatically recognizes the days left over, reminders on check-list to be carried out and finally on the day of journey, bot automatically sends the information of weather, traffic, time on arriving airport and with the help of smart parking system bot analyze the parking space using ease of mobility with **Microsoft Azure IOT Hub** real time data collection to park the vehicle. All these applications enables the passenger to arrive and park the vehicle in airport with at most ease of use.

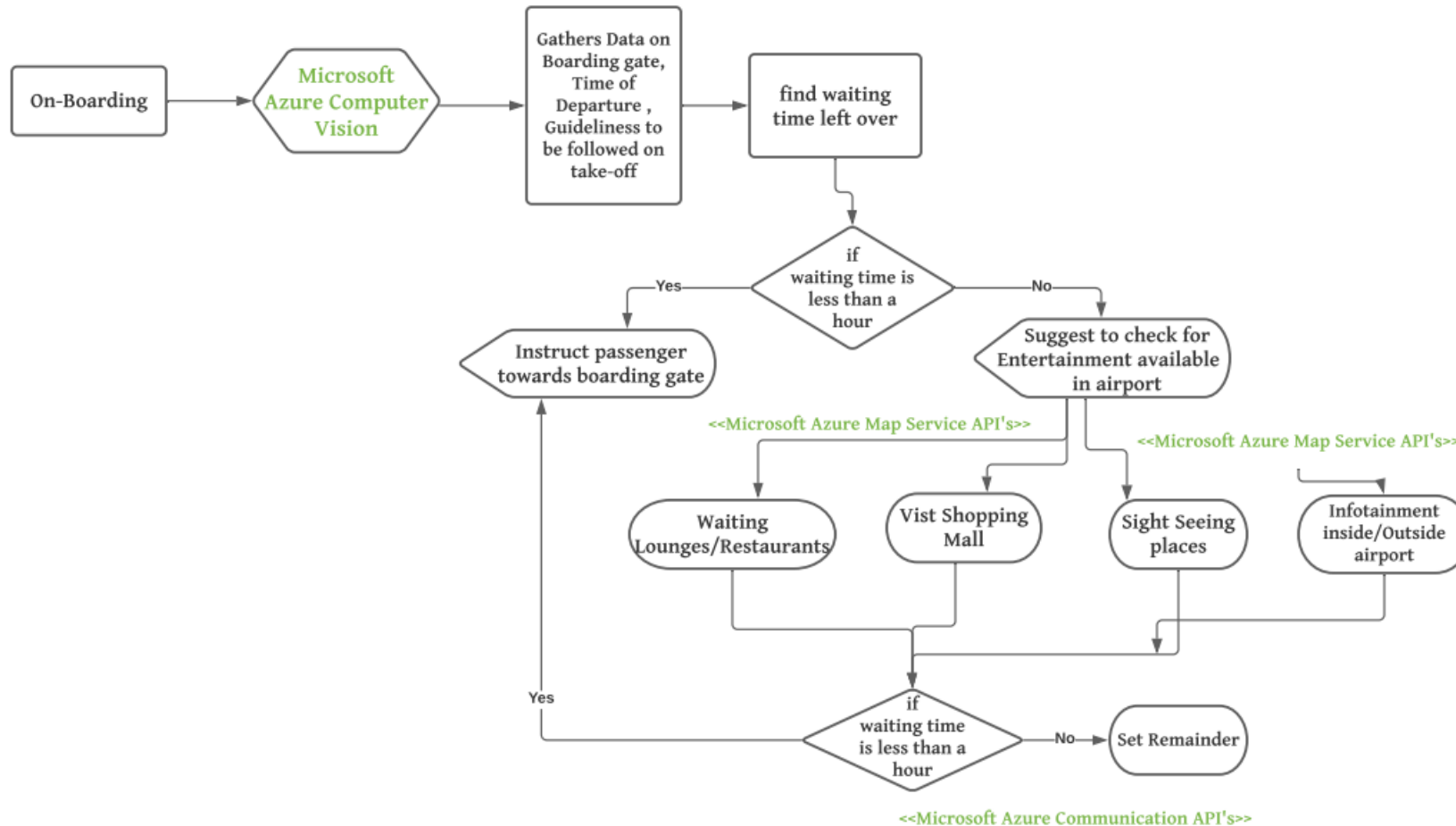
Auto-Assist in Check-in



NavigatewidMe helps the passenger in auto-assisting during check-in process once they arrived to airport. At the time arriving airport, the bot recognizes the place of visit using GPS and turns on **Microsoft Azure Communication Api** to provide proper guidance and instructions to the passenger to perform self-Kiosks independently without manual guidance and initiates them to proceed with security checks and alerts for the next steps. With the usage of **Microsoft Azure Notification Hubs**, the bot identifies if it's an international trip or a domestic trip. Based on the info gathered, it navigates the passenger to either Immigration and Customs if required; otherwise, it navigates towards on-boarding. If it's an international travel, the bot guides the passenger to perform the next set of process to do with immigration and customs, such as carrying a passport, visa, ID proof, reason of visit, and other travel documents required to complete immigration and customs.

On-Boarding Auto-Assist

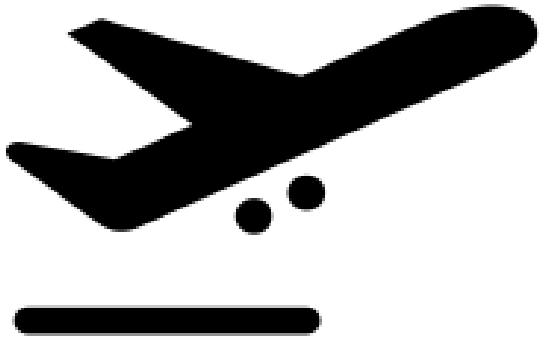
ON-BOARDING



NavigatewidMe helps in auto-guiding the passenger during on-boarding once the check-in, security checks, Immigration and custom's are successfully done. By using **Microsoft Azure computer vision** bot gathers the required information for on-boarding such as time left for departure , boarding gate number , seat number. If the waiting time for the departure is more than a hour, then bot may suggest the passenger to take a nap , rest, relax by choosing entertainments available in the airport with **Microsoft Azure Map service** to provide nearest sight seeing, restaurants , visit shopping mall, infotainment to relax and to spend time effectively inside the airport. Bot automatically runs in the background to capture the time left over and notifies/reminds using **Microsoft Azure Communication Api** the passenger to assemble on boarding gateway if waiting time is less than a hour. So that the passenger will use the waiting time as per their wish. Otherwise bot instructs the passenger to wait for the boarding gate if time is up.

Take-Off and Departure

At the time of Departure *NavigatewidMe* bot notifies the passenger by prompting the time on travel, delay time in arriving destination ,weather in the destination with all such destination information to the passenger for their safe journey using **Microsoft Azure communication Api**. Once the passenger boarded in Flight, Bot prompts with a small note of send off message and goes on airplane mode until its landing.



HAPPY & SAFE JOURNEY!!

Touchdown and Arrival

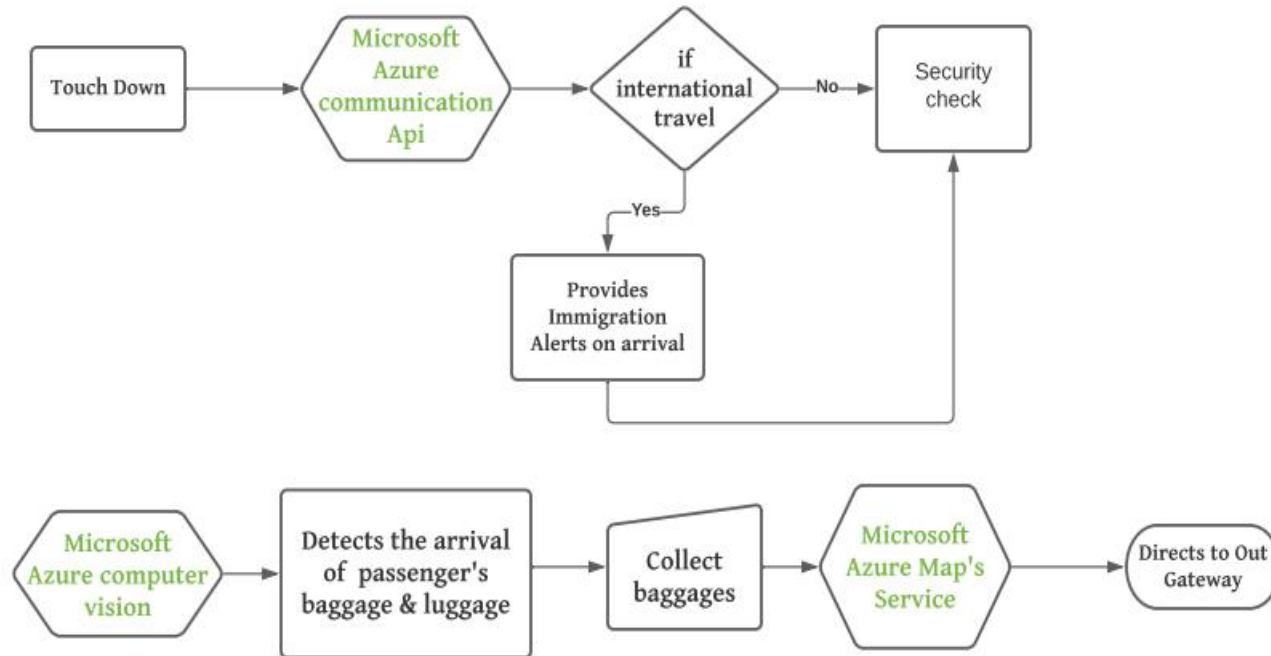
Once the flight landed in the destination and passenger turns off the airplane mode , *NavigatewidMe* identifies the location using GPS and starts providing information regarding the arrival with a small welcome note on arrival , proceed with the immigrations and cabin baggage/luggage collection notifications



Welcome your **LANDING!!**

Auto-Assist in Arrival

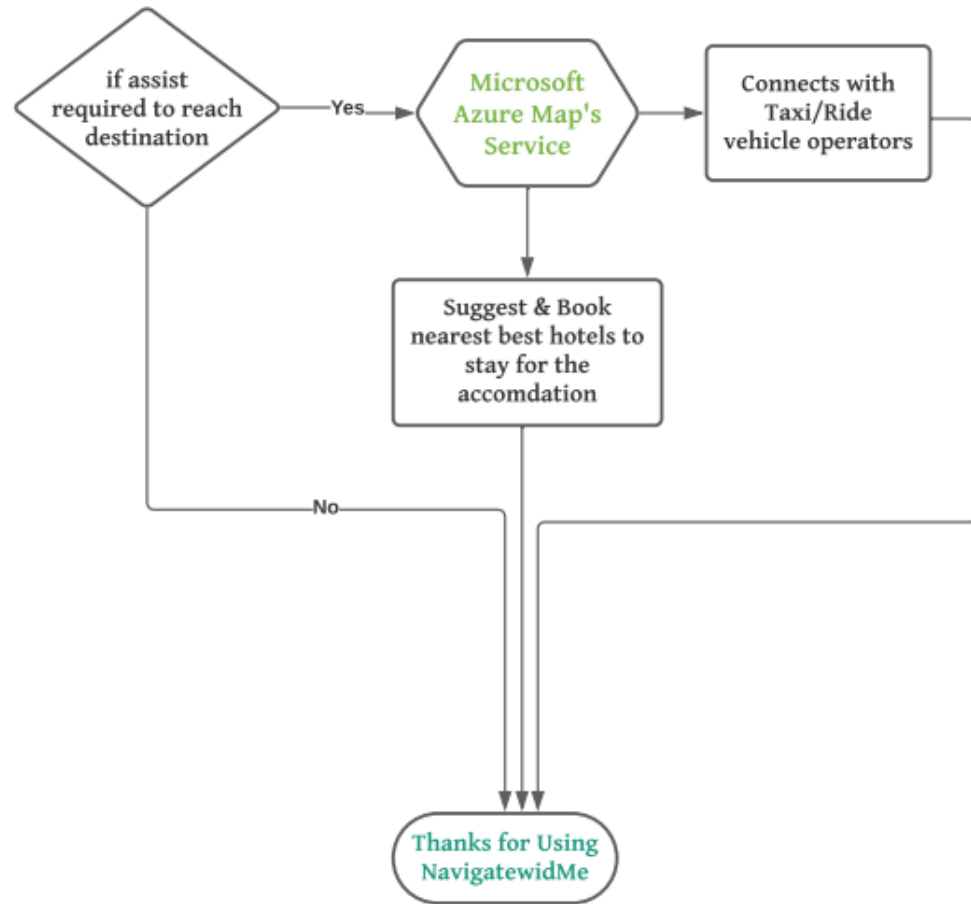
AUTO-ASSIST IN ARRIVAL



NavigatewidMe helps in auto-guiding the passenger on arrival, once the passenger arrives the destination airport. Using **Microsoft Azure communication** it will route the passenger to perform immigration and customs check on arrival and proceed with security checks otherwise, proceed towards security check and baggage collection. **Microsoft Azure computer vision** provides the information on collecting luggage using detection of spatial analysis in queue while waiting for the luggage. This helps the passenger to wait for a minimum period of time. On successful collection of luggage/baggage, **Microsoft Azure Map's Service** directs the passenger to the out gateway (Exit) of the airport.

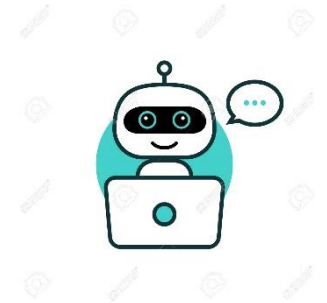


Auto-Assist in Arriving Destination



Once the passenger exits from the airport bot prompts for the assistance required to reach destination, if 'Yes' response is provided then bot automatically uses Microsoft Azure Map's service to connect Taxi/Ride Vehicle operators and book a ride to reach their destination. Meanwhile , If any language assist required in the destination or Image recognition required with the help of Microsoft Computer Vision service it will guides the passenger towards their destination . Also if the passenger wants to book a hotel for a stay / accommodation then bot suggest best hotel as per passenger's preference as defined in pre-travel experience.

After reaching the destination bot sends notification by *Thanks for using NavigatewidMe.*



Post Travel Experience

Once the passenger is all set and reached the destination , bot prompts with the small note on journey and requests for feedback to improve and keep the good things to make it best with the below satisfaction smiles.



Feedback is the key to improve the qualities better to provide best ease of use

Auto-Pilot Mode

Auto-Pilot mode is nothing but perform all the stages listed above as a repetitive manner as a regular activity to avoid human intervention and perform 100% automation during the flight journey to provide best user experience.

Advantages of using *NavigatewidMe*

- Assist the passenger from E2E arriving in destination without any manual intervention.
- Provides Quality results in searching and booking flight tickets.
- Reduces the amount of time invested in finding/searching for best flight
- With the tremendous features of Microsoft Azure Service helps the passenger to the at most ease of use.



Thank You ☺