Transit App UI flow

Table of Contents

1.0 Splash Screen 5

2.0 Visibility Verification (check visibility before moving to sign in/up page) 6

3.0 Normal Mode (normal user/hearing disabilities/speech disorder) 7

3.1 Sign Up 7

3.2 Sign In 8

3.3 Choose Location 9

3.4 Find Best Route for Bus/Train/MRT or MRT 10

3.5 Journey Directions Confirmation 11

3.6 Start Trip 12

3.7 Step by Step Directions 13

3.8 My Profile 14

3.9 Edit Profile 15

3.10 Notification 16

4.0 Options - AI Voice Agent 17

4.1 Journey (Option 1) 18

4.1.1 Request for Destination - User 18

4.1.2 Transport Options - AI Voice Agent 19

4.1.3 Choose Transport – User 20

4.1.4 Best Route for Bus Transport Options - AI Voice Agent 21

4.1.5 Choose Other Route Options – User 22

4.1.6 Rephrase Best Route for Bus Transport Options - AI Voice Agent 23

4.1.7 Starts Journey – User 24

4.1.8 Final Journey Confirmation – AI Voice Agent 25

4.1.9 AI Agent Starts the Trip - AI Voice Agent 26

4.1.10 Current Location Updated – User 27

4.1.11 AI Agent Guides the Trip - AI Voice Agent 28

4.1.12 Bus Update - User 29

4.1.13 AI Agent Guides the Bus Stops - AI Voice Agent 30

4.1.14 AI Agent Guides the Bus Stops - AI Voice Agent 31
4.1.15 User Updates Status - User 32
4.1.16 AI Agent Guides the Trip 2 - AI Voice Agent 33
4.1.17 AI Agent Guides the Trip 3 - AI Voice Agent 34
4.1.18 User Replies with Thank You 35
4.1.19 Trip Ends - AI Voice Agent 36
4.2 Editing (Option 2) 37
4.2.1 Navigate to Profile Page - User 37
4.2.2 AI Agents Speaks Profile Details - AI Voice Agent 38
4.2.3 Edit/Sign out - AI Voice Agent 39
4.2.4 Edit profile - User 40
4.2.5 Asking what to change - AI Agent Voice 41
4.2.6 Change Email – User 42
4.2.7 AI verifies Biometrics - AI Agent 43
4.2.8 Email address Changed - AI Agent Voice 44
4.3 Sign Out (Option 3) 45
4.3.1 User Speak to Sign Out - User 45
4.3.2 Sign out - AI Agent Voice 46
4.4 Notification (Option 4) 47
4.4.1 User Speak to navigate to Notifications - User 47
4.4.2 AI ask for which Notifications – AI Voice Agent 48
4.4.3 User ask for Today's Notifications - User 49
4.4.4 AI explains the Notifications – AI Voice Agent 50
4.5 Change Languages (Option 5) 51
4.5.1 User Speak to change language - User 51
4.5.2 Request which language - AI Agent Voice 52
4.5.3 User choses language - User 53
4.5.4 Language changed - AI Agent Voice 54
5.0 User choose options - Hearing Disabilities 55
5.1 User choose options - Hearing Disabilities 56
5.2 Journey (Option 1) 57
5.2.1 Replied Destination - User Speak to reply 57

5.2.2 Choose Transport Options - AI Agent Hear 58
5.2.3 User choose Bus - User Speak to reply 59
5.2.4 Find Best Route for Bus Transport - AI Agent Hear 60
5.2.5 User changes route preference - User Speaks 61
5.2.6 Regenerate Best Route for Bus Transport - AI Agent Hear 62
5.2.7 Start Journey - Speak to reply 63
5.2.8 Final Route Confirmation before start - AI Agent Hear 64
5.2.9 AI Agent Guides the Trip - AI Agent Hear 65
5.2.10 Updates location - User Speak to reply 66
5.2.11 AI Agent Guides the Trip 2 - AI Agent Hear 67
5.2.12 User Updates Bus arrival - User Speak to reply 68
5.2.13 AI Agent Guides the Trip 3 - AI Agent Hear 69
5.2.14 AI Agent Alerts Bus Stop - AI Agent Hear 70
5.2.15 User updates location - User Speak to reply 71
5.2.16 AI Agent Guides the Trip 4 - AI Agent Hear 72
5.2.17 AI Agent Guides the Trip 5 - AI Agent Hear 73
5.2.18 User Thank AI Agent - User Speak to reply 74
5.2.19 AI Agent Ends Trip - AI Agent Hear 75
5.3 Editing (Option 2) 76
5.3.1 Navigate to Profile Page - User Speaks 76
5.3.2 AI Agents Speaks Profile Details - AI Agent Hear 77
5.3.3 Edit/Sign out - AI Voice Hear 78
5.3.4 Edit profile - User Speaks 79
5.3.5 Asking what to change - AI Agent Hear 80
5.3.6 Change Email - User Speaks 81
5.3.7 AI verifies Biometrics - AI Agent Hear 82
5.3.8 Email Address Changed - AI Agent Hear 83
5.4 Sign Out (Option 3) 84
5.4.1 User Speak to Sign Out - User Speaks 84
5.4.2 Sign out - AI Agent Hear 85
5.5 Notification (Option 4) 86
5.5.1 User Speak to navigate to Notifications - User Speaks 86

5.5.2 AI ask for which Notifications - AI Voice Hear 87
5.5.3 User ask for Today's Notifications - User Speaks 88
5.5.4 AI explains the Notifications - AI Voice Hears 89
5.6 Change Languages (Option 5) 90
5.6.1 User Speak to change language - User Speaks 90
5.6.2 Request which language - AI Agent Hear 91
5.6.3 User choses language - User Speaks 92
5.6.4 Language changed - AI Agent Hear 93

Transit App UI flow with explanation

FIGMA Link:
https://www.figma.com/design/2StehEHQIgmOpqpmCrV6f0/Transit?node-id=0-1&t=o0GtWQa3w5Gvr5hR-1

1.0 Splash Screen

Figure 1: Splash Screen

When the user opens the app, the first screen that appears for 80 seconds is the Splash screen.

2.0 Visibility Verification (check visibility before moving to sign in/up page)

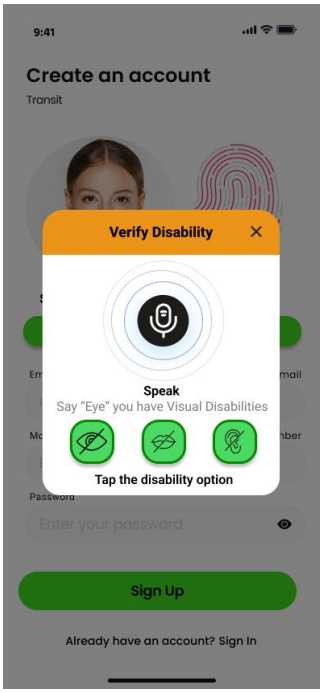
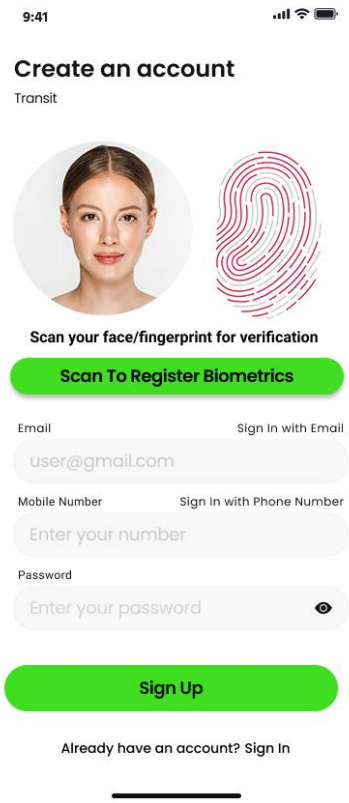


Figure 2: Visibilty Verification

After the “Splash Screen”, the user will be navigated to the Sign Up Page, users have to choose their “disability” at the “verify disability tab”, before moving to the Sign Up page, there are 3 options given such as “eye”, “speech” and “hearing”, users has to choose one.

3.0 Normal Mode (normal user/hearing disabilities/speech disorder)

3.1 Sign Up

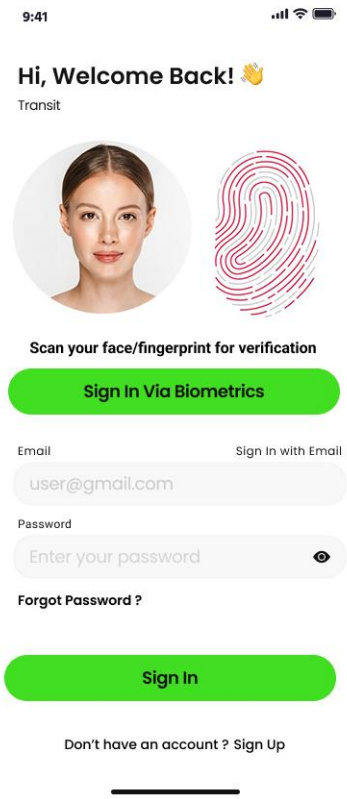


After user has choose the visibility, it will bring them to their respective pages. If user chooses the “speech inability”, they will be navigated to the Sign Up page.

New users can input their details to create an account. Users can also tap “Scan To Register Biometrics” to register their biometrics.

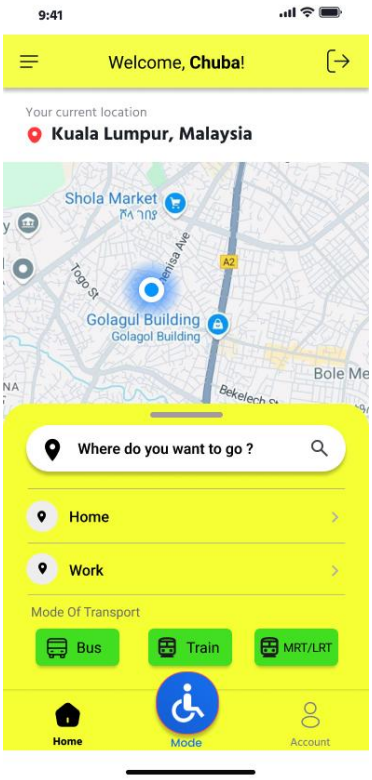
Existing users can click the “Already have an account? Sign In” button to navigate to the sign in page to login.

3.2 Sign In



If the user navigates to the Sign In Page, they can either scan their biometrics or input their “email” and “password” to Sign In to the application.

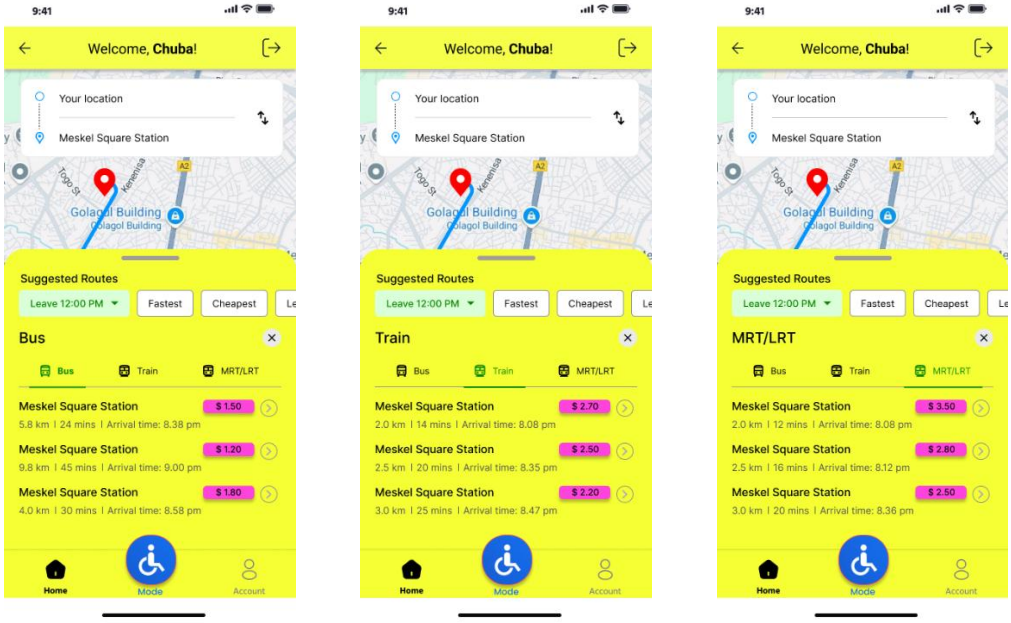
3.3 Choose Location



After a successful sign up or sign in, the user will be navigated to the home page which will be known as the “choose location”. Before searching the destination, the user will have to choose the mode of transport such as the “Bus”, “Train”, “MRT/LRT”. The app will show the user’s live location and the user will have to enter the destination location in the text input, and choose any of the location options provided. Users will have an option to save their frequent travelling location such as the “Home” and “work” location and they can tap it instead of typing and searching for the location. To store the “home” and “work” location, the user will have to search the location in the search input and then tap and hold the map and store the location in their preferred category.

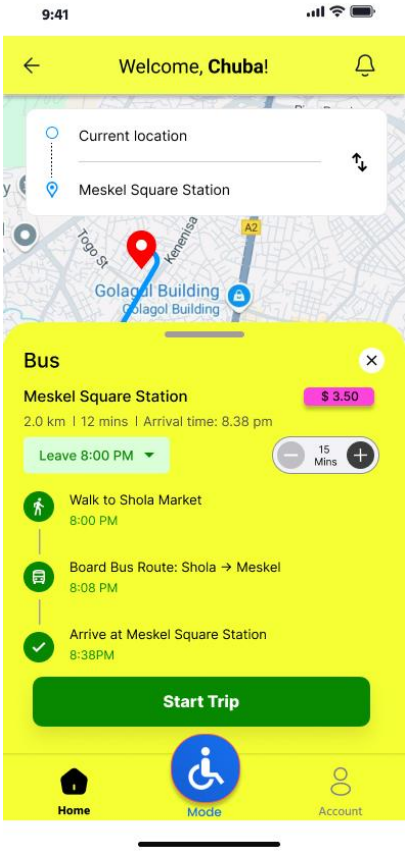
Additionally, there is a round blue button that displays as mode, users can tap the button and change their accessibility mode as shown in “2.0 Visibility Verification”.

3.4 Find Best Route for Bus/Train/MRT or MRT



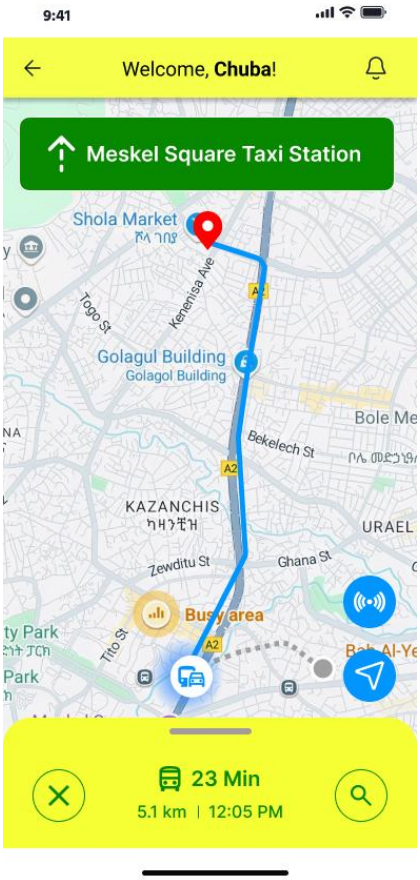
After a successfully choosing the end location/destination, they will be navigated to the “Find Best Route” Page and users can choose the best route for their transportation of choice. User can also tap other transportation options to check out or choose other routes.

3.5 Journey Directions Confirmation



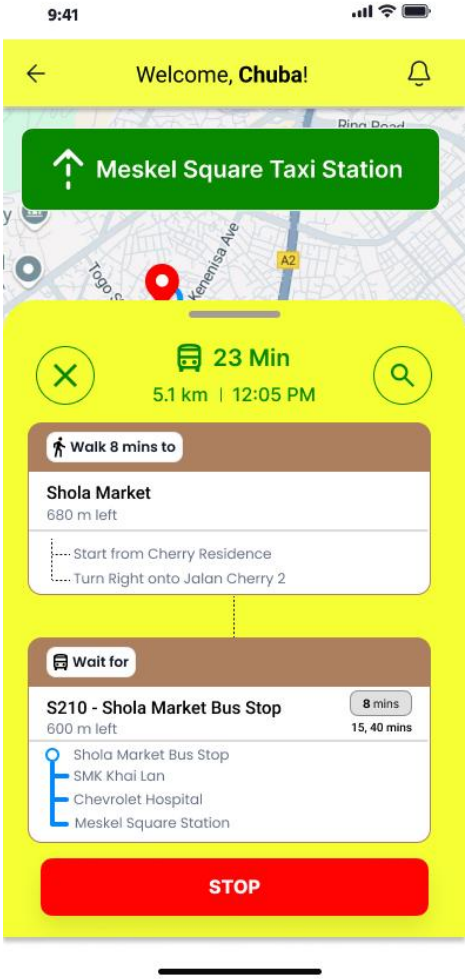
After a successfully choosing the best route for their preferred transport, the user will be navigated to the “Journey Directions Confirmation” Page and users can have a look at their journey directions plan before tapping the “Start Trip” button to start their trip. User can also change their departure time, like “Leave at 8:00 PM”, “add on 15 mins” or “tomorrow”.

3.6 Start Trip



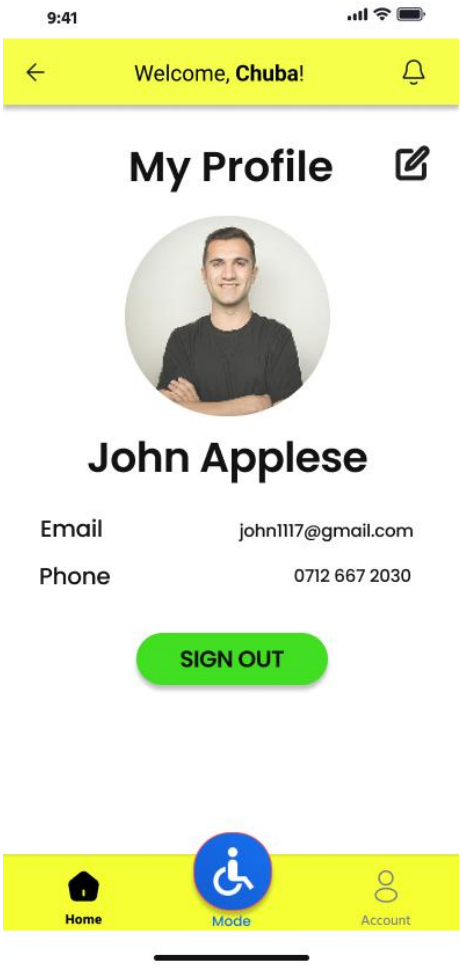
After the user has started their journey, they will be navigated to the “Start Trip” page and then the system will guide them by giving life update and travel direction.

3.7 Step by Step Directions



In the same “Start trip” screen, the user can slide up the bottom tab, to view the full details about their step-by-step directions of the journey.

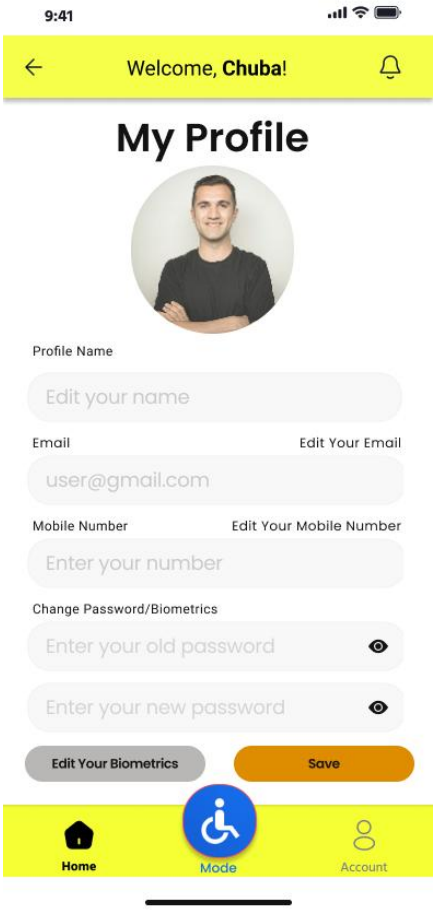
3.8 My Profile



If the user clicks the account icon at the Home Bar, they will be navigated to the “My Profile”. In this page, the user can view their profile picture, profile name, email and phone number. User were also given an option to sign out from the system.

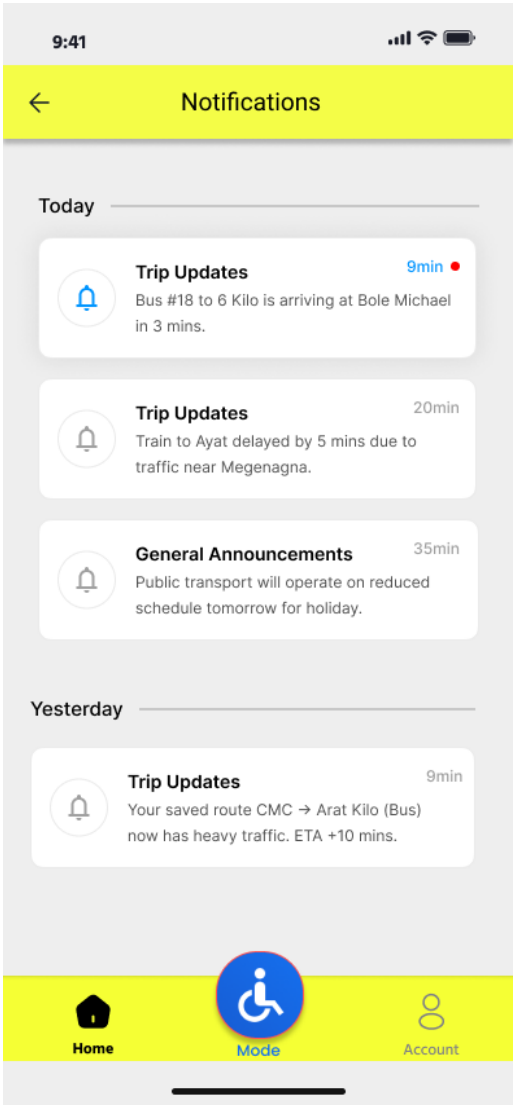
Users can click the edit (pencil icon) button on the top right corner to navigate to the “edit profile” page.

3.9 Edit Profile



In the edit profile page, users can edit their personal details such as profile name, email, mobile number, password and biometrics.

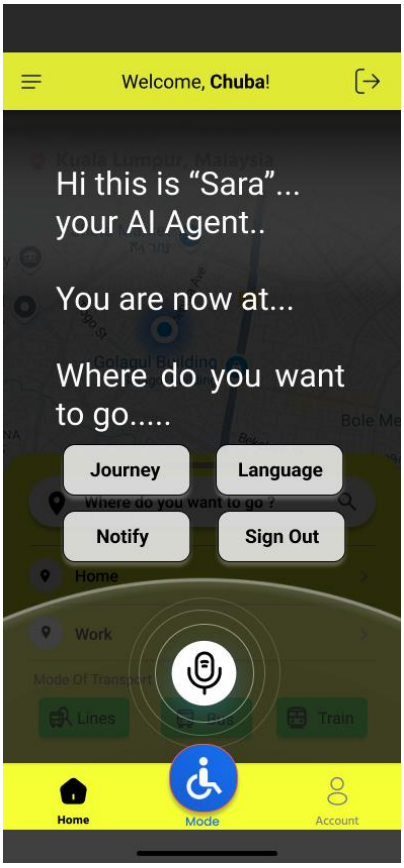
3.10 Notification



If the user clicks the bell icon button on the top left corner, they will be navigated to the "Notification" page. In that page, users can view their recent notification regarding their journey.

Visual Disabilities

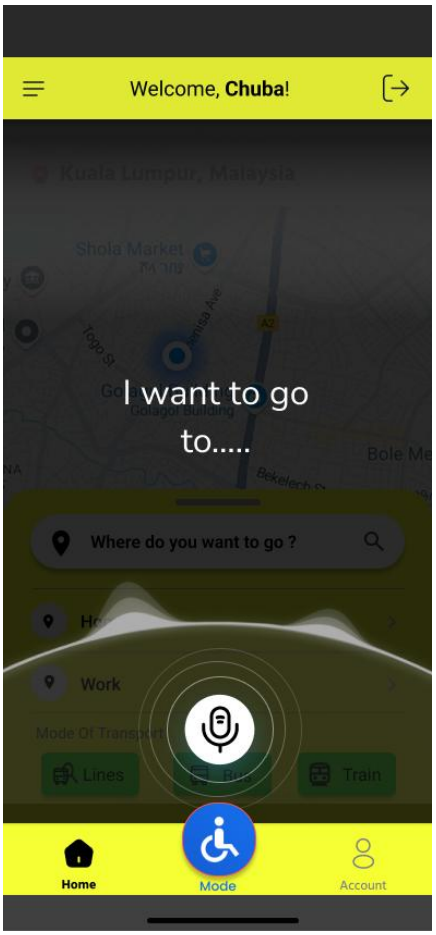
4.0 Options - AI Voice Agent



If the user taps the “eye” button, the system’s mode will be changed to Visual Disability’s mode and they will be navigated to the Visual Disability UI as shown in the screen above. This mode will be handled by Gemini AI Assistant. The agent will introduce itself an announce the live location of the user. Then the AI Agent called Sara will ask the user on their destination location.

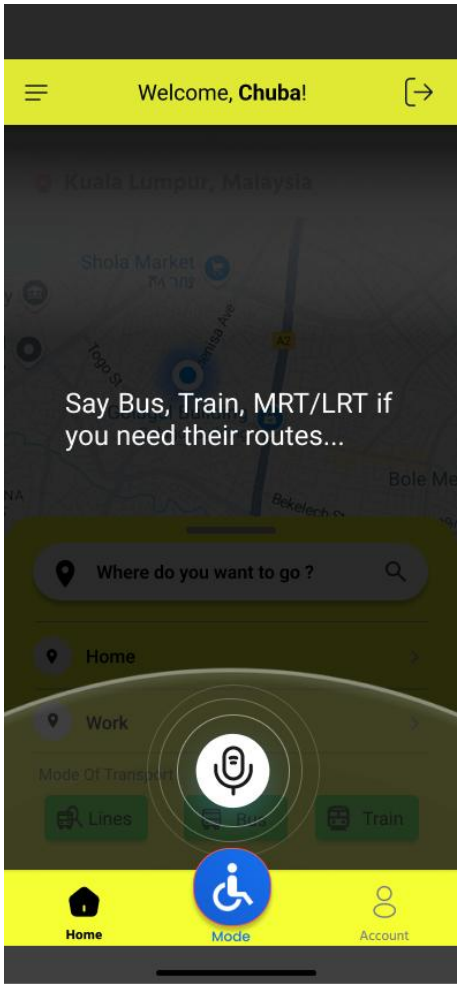
4.1 Journey (Option 1)

4.1.1 Request for Destination - User



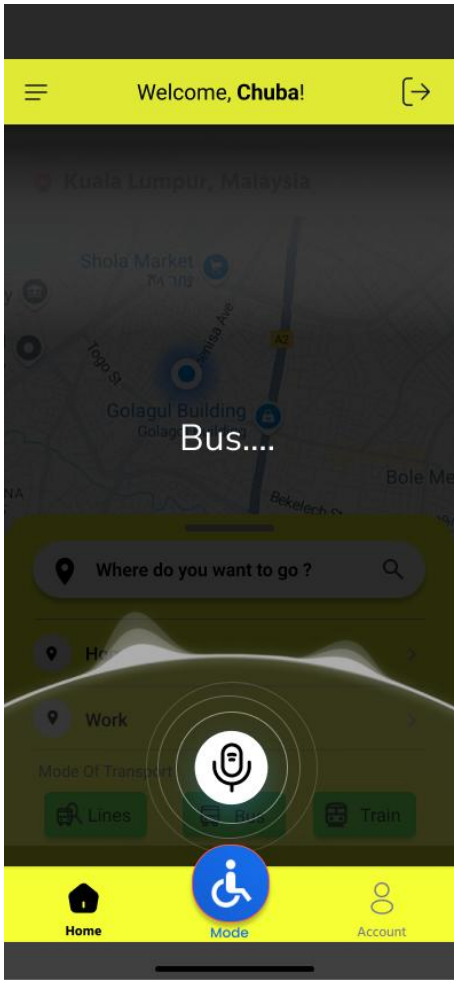
The user can speak to the AI Agent regarding where he/she wanted to go to or destination location.

4.1.2 Transport Options - AI Voice Agent



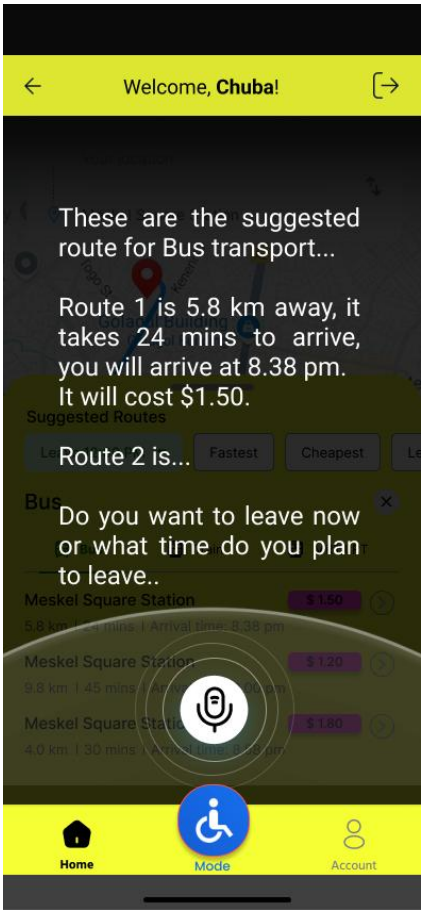
The AI Agent Sara will process the user's input audio and ask the user about the "mode of transport" before suggesting the best routes.

4.1.3 Choose Transport – User



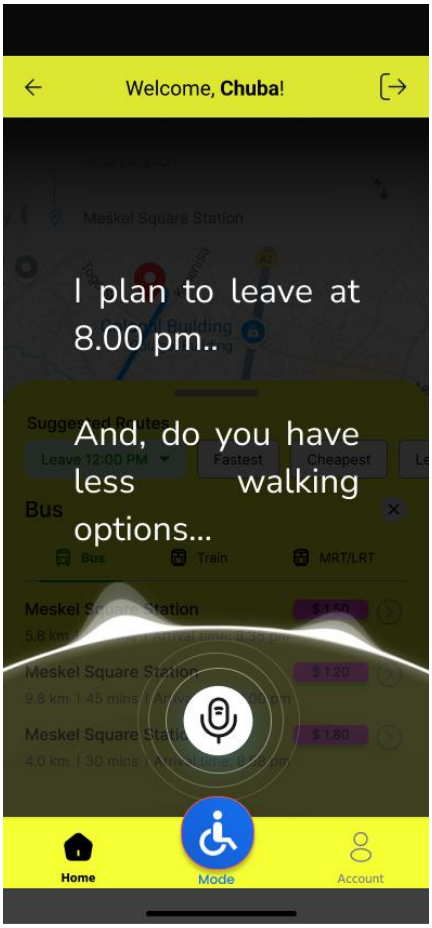
The user will say their preferred mode of transport.

4.1.4 Best Route for Bus Transport Options - AI Voice Agent



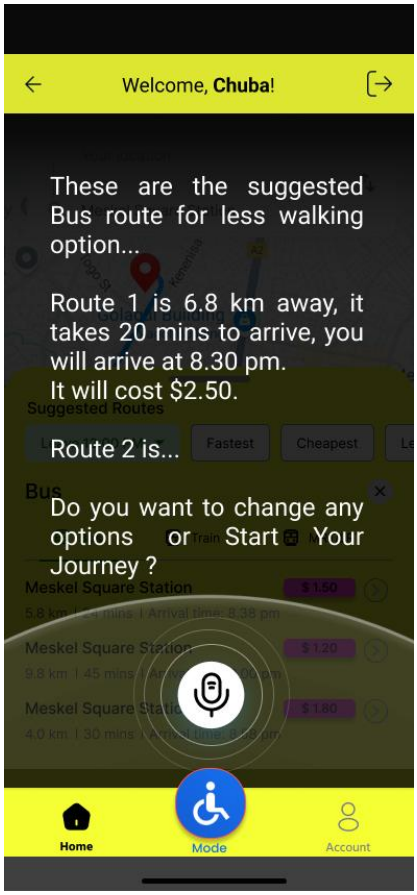
The user will process the input audio and explain the routes available and its full details such as the distance, journey time taken, arrival time and travelling cost. These details will be based on the mode of transport that the user has chosen. Then the AI Agent will pause and wait for users respond.

4.1.5 Choose Other Route Options – User



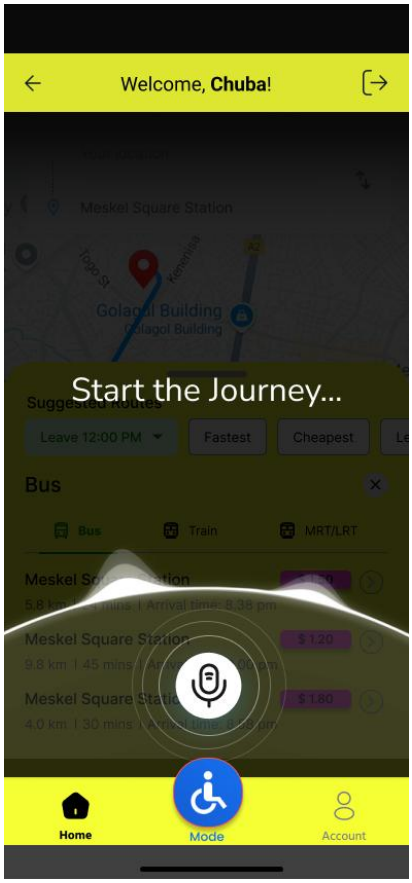
The user will then allow to say about what time they plan to leave/ start their journey and other options if they want, such as less walking options.

4.1.6 Rephrase Best Route for Bus Transport Options - AI Voice Agent



The AI Agent will process the user's input audio and will recalculate the route based on user's preference and explain the available route again. Then the AI Agent will pause to hear the user's respond.

4.1.7 Starts Journey – User

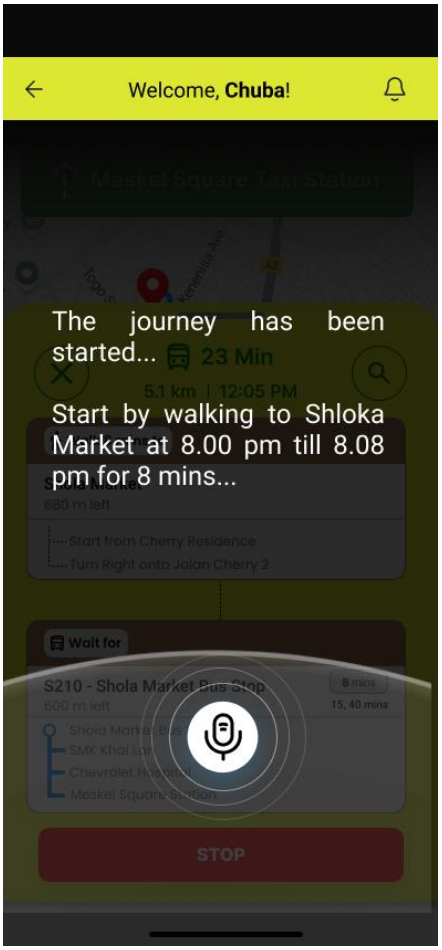


If the use is satisfied with the selected route, they can say “Start the Journey” to start the journey or keep negotiation with other preference.

4.1.8 Final Journey Confirmation – AI Voice Agent

After hearing this, the AI Agents will announce the full details of the final chosen journey before the system starts the journey.

4.1.9 AI Agent Starts the Trip - AI Voice Agent

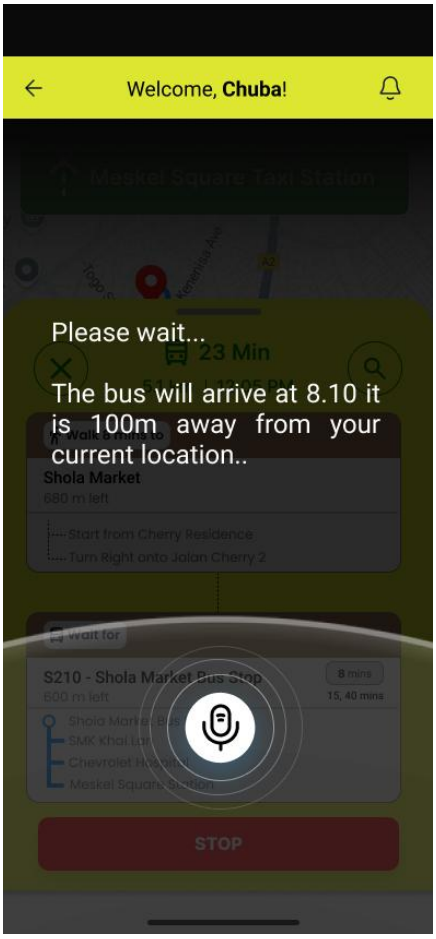


Then the journey will be started by the system and the AI Agent will be guiding the users verbally throughout their journey.

4.1.10 Current Location Updated – User

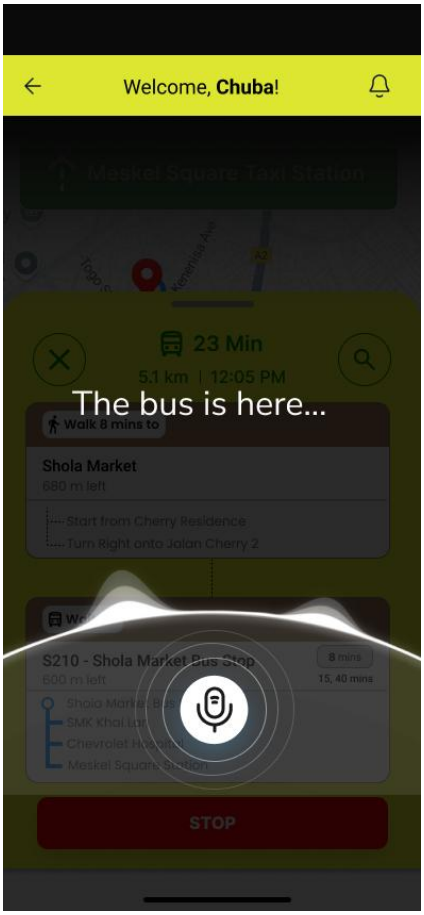
Then the user will reply with their every action to the AI Agent.

4.1.11 AI Agent Guides the Trip - AI Voice Agent

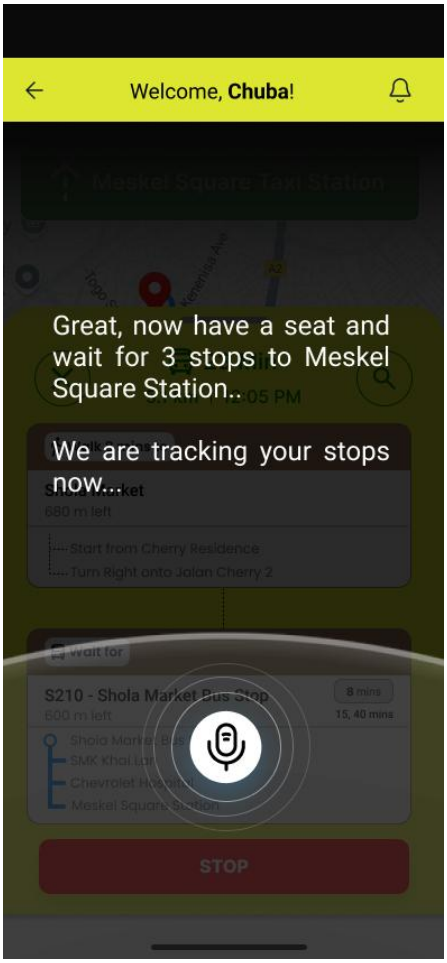


After hearing the current status of the user, the AI Agent continue guiding the user towards the end of their journey.

4.1.12 Bus Update - User

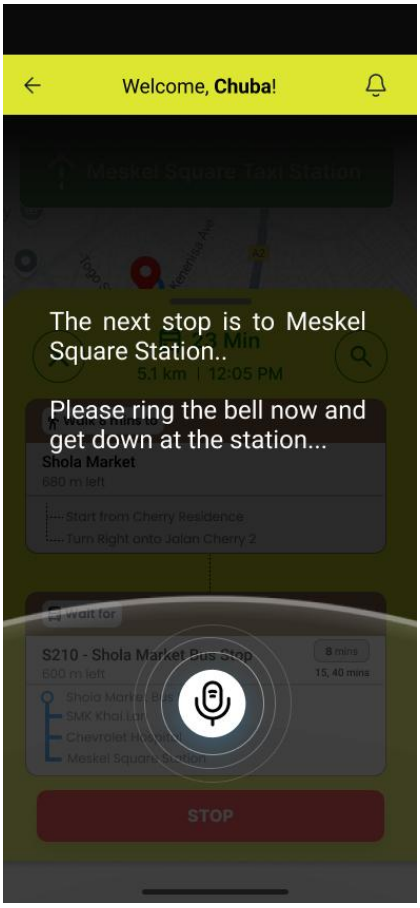


4.1.13 AI Agent Guides the Bus Stops - AI Voice Agent



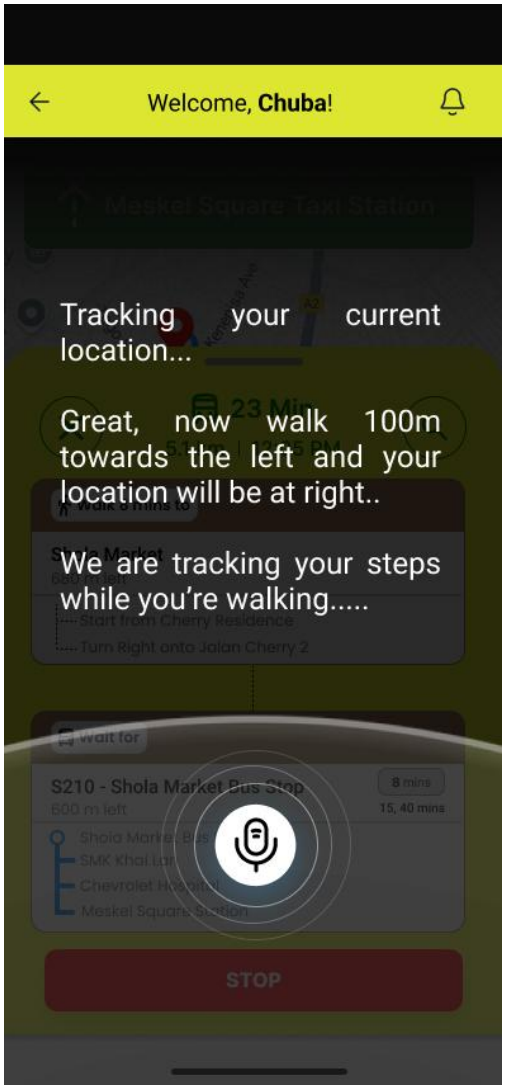
When the user has got into the bus, the system will be tracking the user's current location/bus station checkpoint to guide the user to get down at the current bus stop to arrive at the correct destination.

4.1.14 AI Agent Guides the Bus Stops - AI Voice Agent



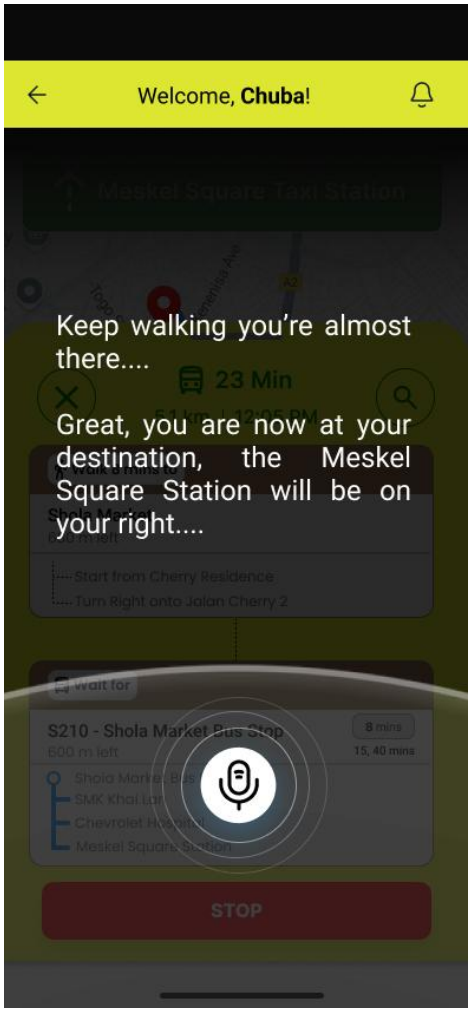
4.1.15 User Updates Status - User

4.1.16 AI Agent Guides the Trip 2 - AI Voice Agent



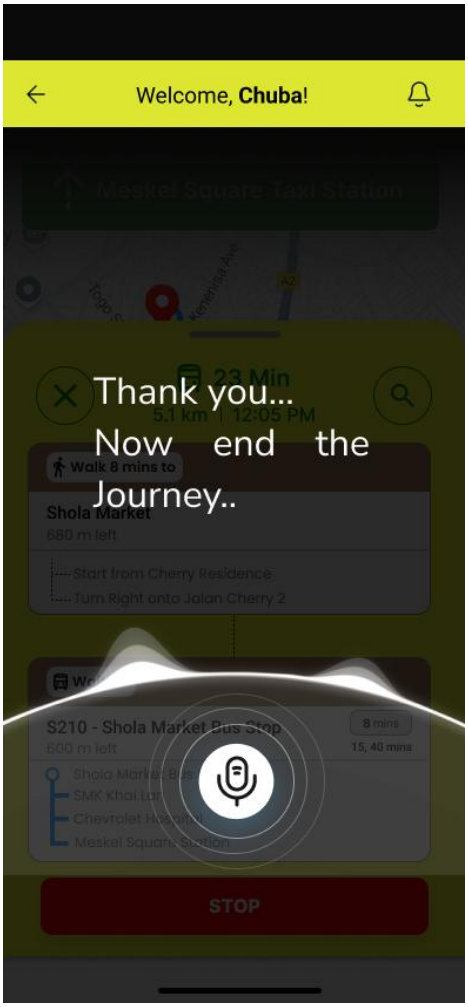
When the user has got down from the bus at the bus stop, the system will calculate the user's current step and then keep guiding the user.

4.1.17 AI Agent Guides the Trip 3 - AI Voice Agent



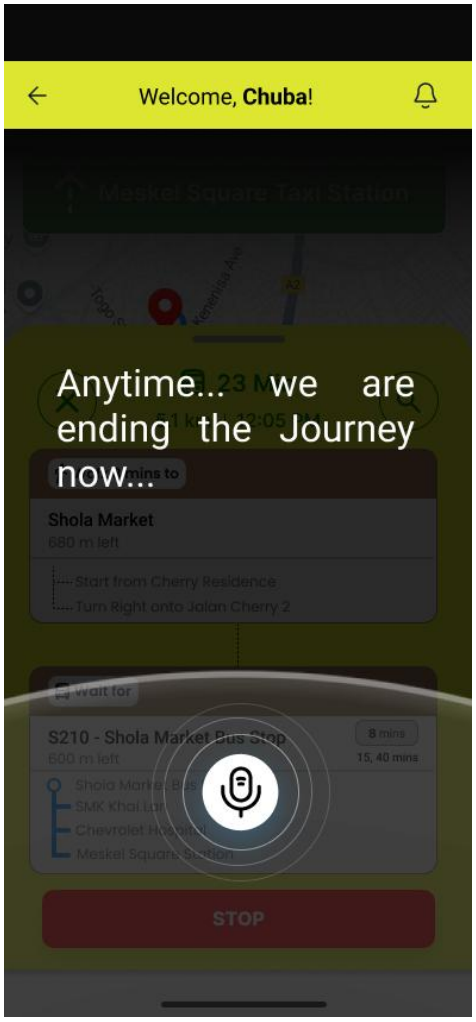
Once the user has arrived at the destination the system will track the user's current location to confirm. Once confirmed the AI Agent will announce to the user that they have successfully arrived at their destination.

4.1.18 User Replies with Thank You



Once the user has arrived, the can say “End the Journey” to exit the journey.

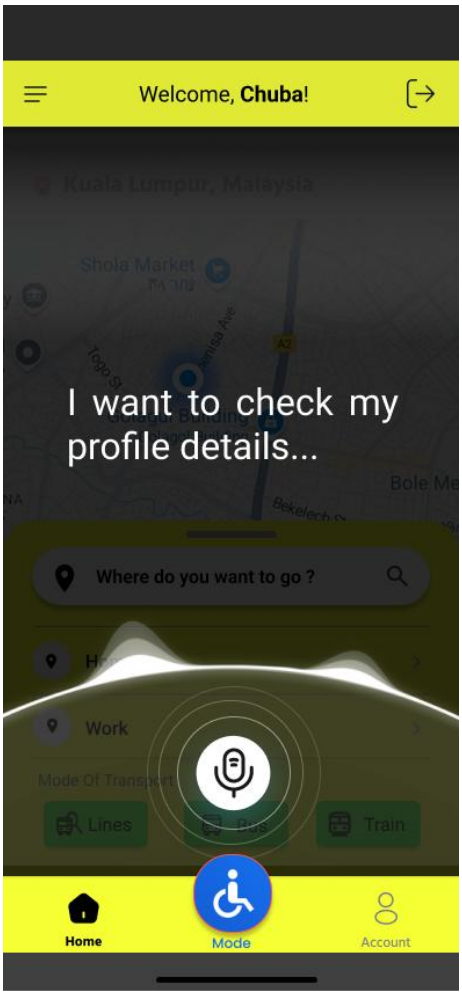
4.1.19 Trip Ends - AI Voice Agent



The system will track the user's current journey to confirm if the user has arrived at the destination and will end the journey.

4.2 Editing (Option 2)

4.2.1 Navigate to Profile Page - User

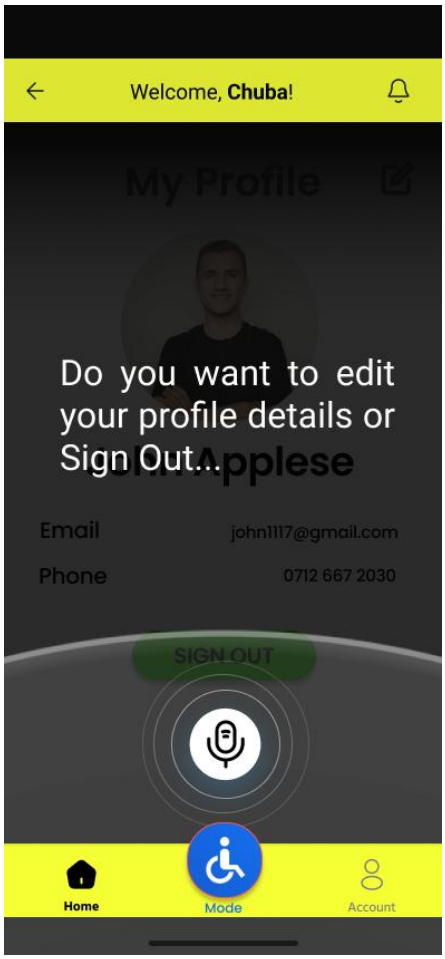


The user can speak to the AI Agent that they wanted to check the profile details.

4.2.2 AI Agents Speaks Profile Details - AI Voice Agent

The AI Agent will then explain to the user about their profile details that they have stored in the system.

4.2.3 Edit/Sign out - AI Voice Agent

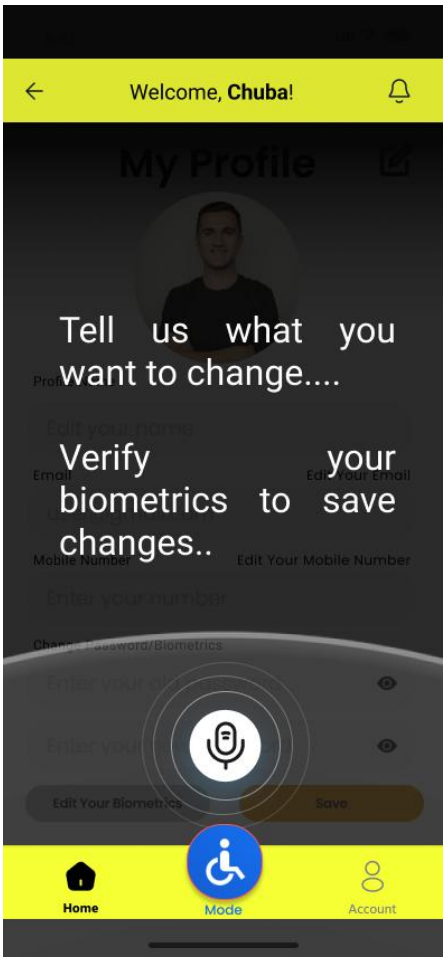


Then the AI Agent will ask the user if they want to edit their profile details or Sign Out.

4.2.4 Edit profile - User

The user can ask verbally to edit the details and the system will change their profile details according to their request.

4.2.5 Asking what to change - AI Agent Voice

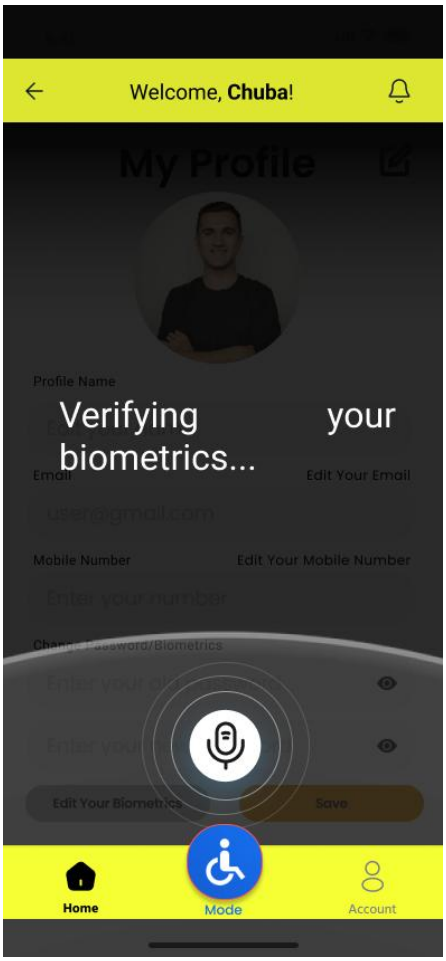


The AI Agents will process the input and reply with what details the user wanted to change.

4.2.6 Change Email – User

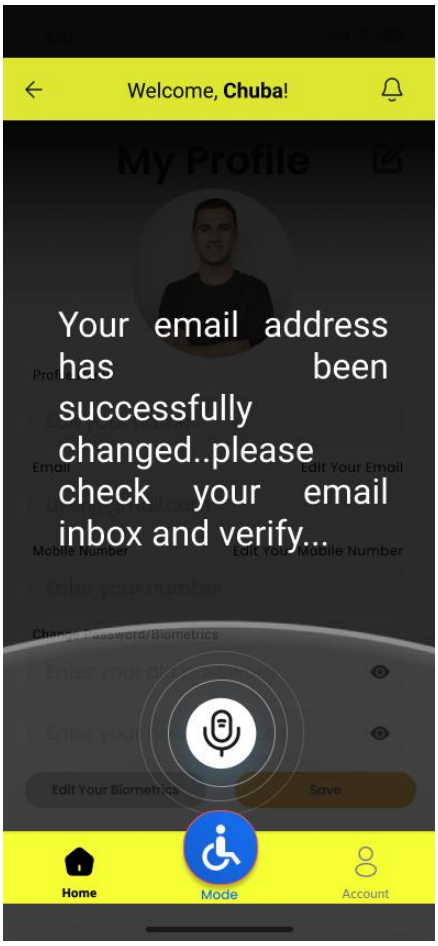
The user will say the details that they wanted to change such as the email address and verify their biometrics for the system to validate if they are the authorized user.

4.2.7 AI verifies Biometrics - AI Agent



The system will then process the input audio and verify the input biometrics.

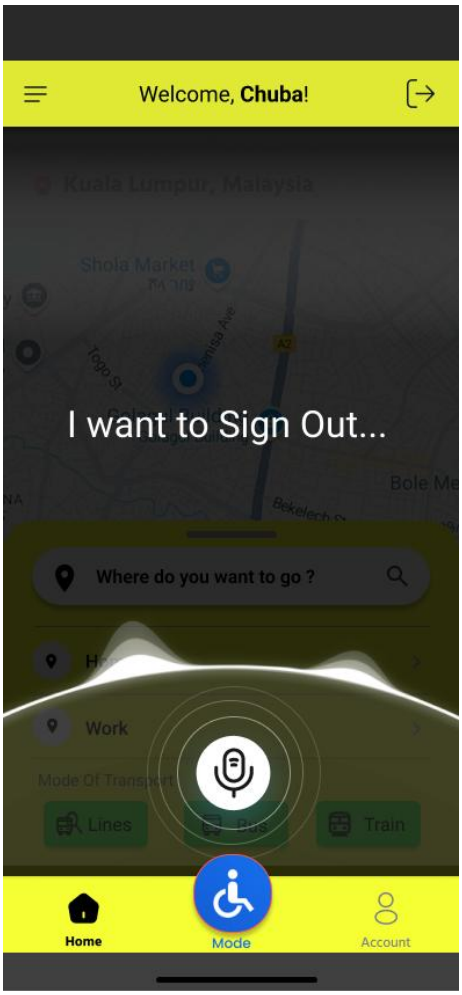
4.2.8 Email address Changed - AI Agent Voice



Then, the AI agent will process the input audio and change it accordingly. Then, it will announce the user about the new email, so that the user can change it if it's wrong.

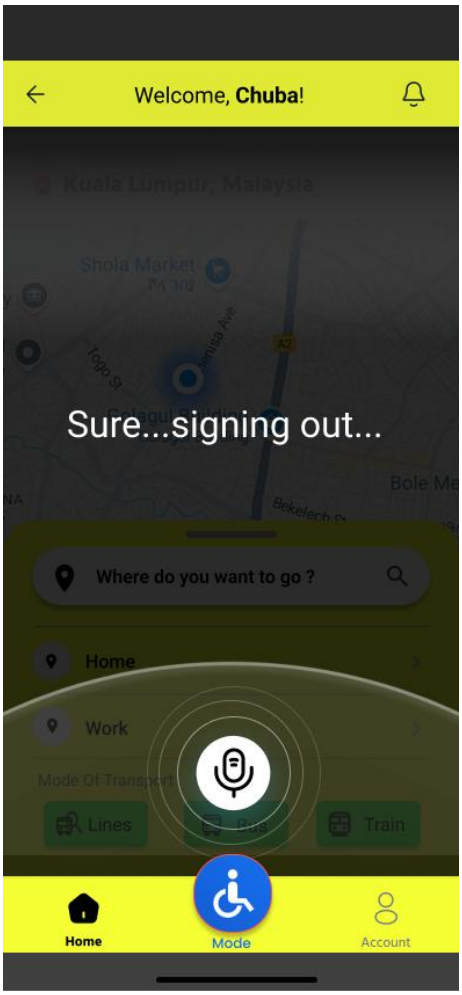
4.3 Sign Out (Option 3)

4.3.1 User Speak to Sign Out - User



The user can speak to the AI Agent that they wanted to sign out.

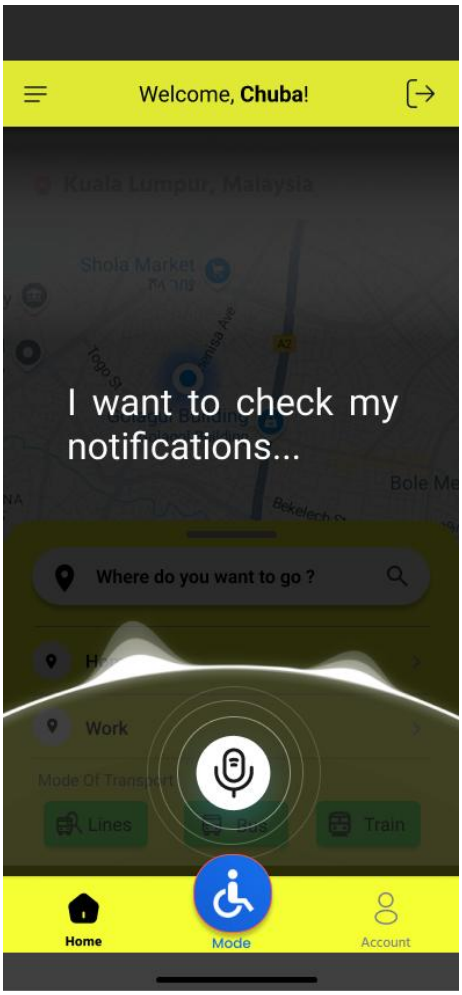
4.3.2 Sign out - AI Agent Voice



The AI Agent will process the input audio and signs the user out form the system.

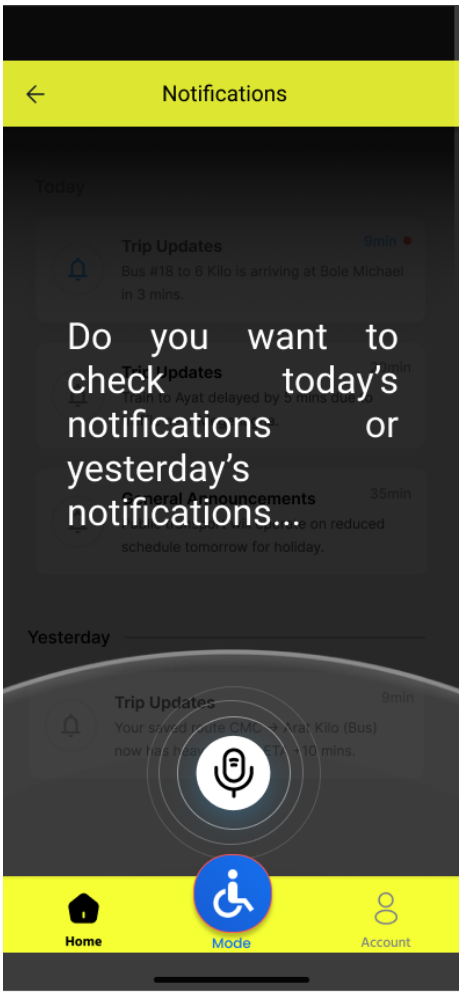
4.4 Notification (Option 4)

4.4.1 User Speak to navigate to Notifications - User



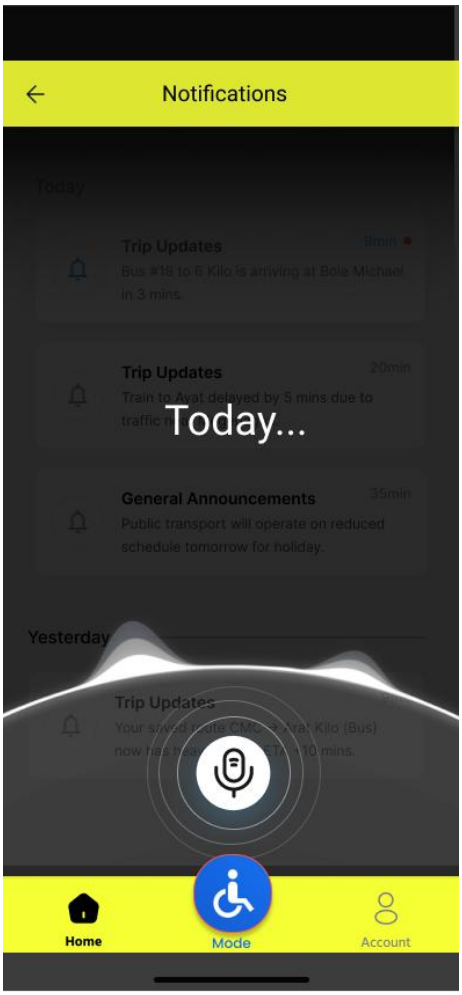
The user can speak to the AI Agent to check the notifications.

4.4.2 AI ask for which Notifications – AI Voice Agent



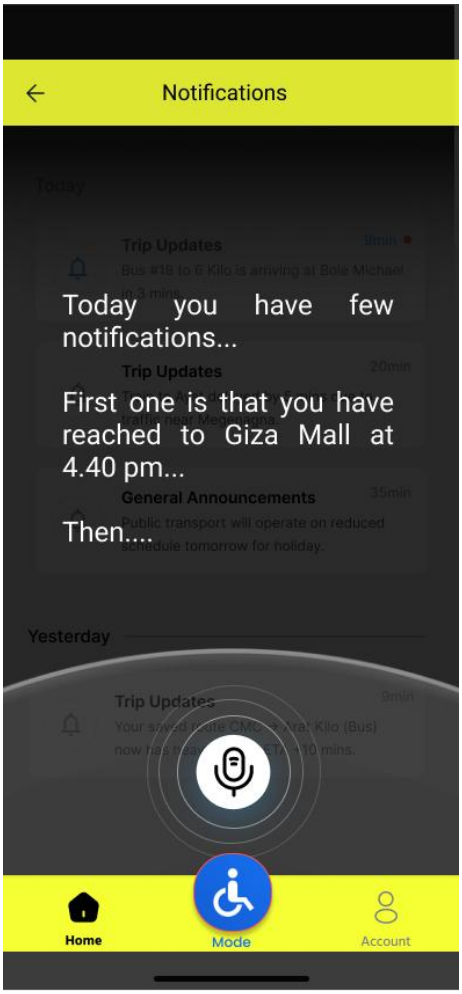
The AI Agent will them ask the user about the timeline of the notification that the user wants to know.

4.4.3 User ask for Today's Notifications - User



The user will reply with the notification timeline.

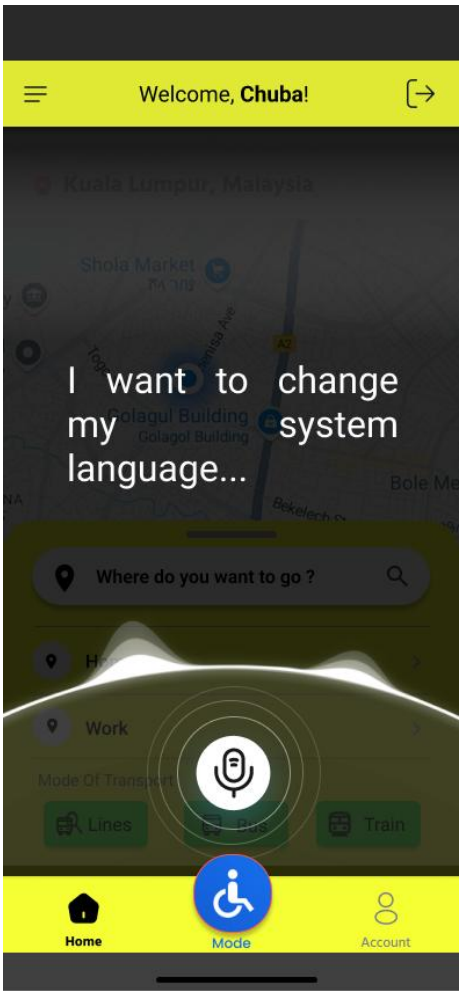
4.4.4 AI explains the Notifications – AI Voice Agent



The AI Agent will then announce the notifications details from the timeline that the user requested.

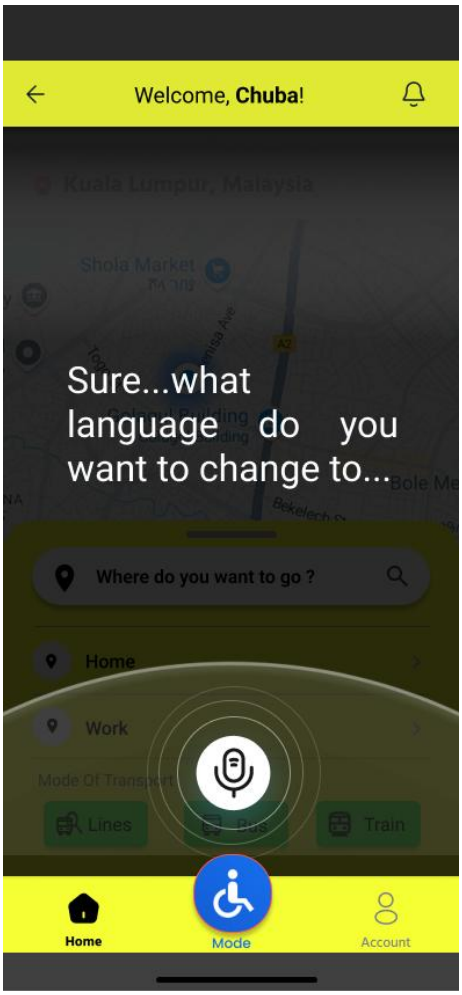
4.5 Change Languages (Option 5)

4.5.1 User Speak to change language - User



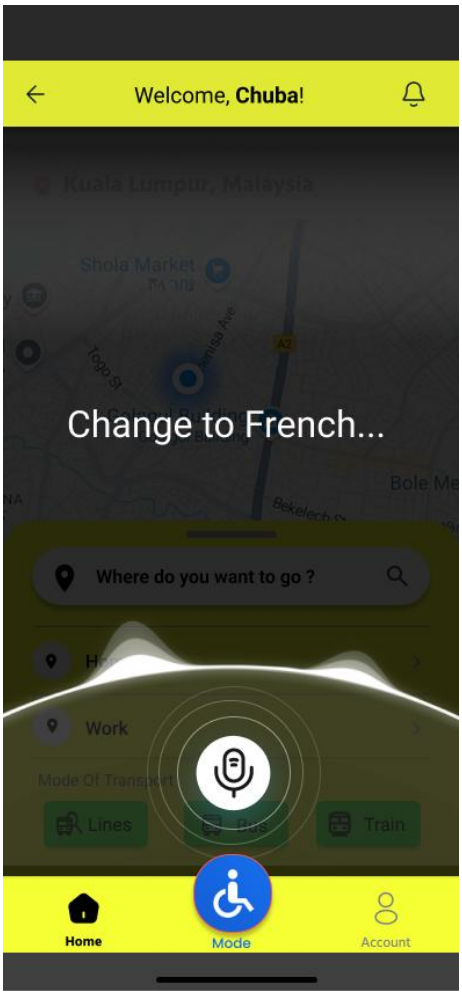
The user can speak to the AI Agent that they wanted to change the system's current language to their desired language.

4.5.2 Request which language - AI Agent Voice



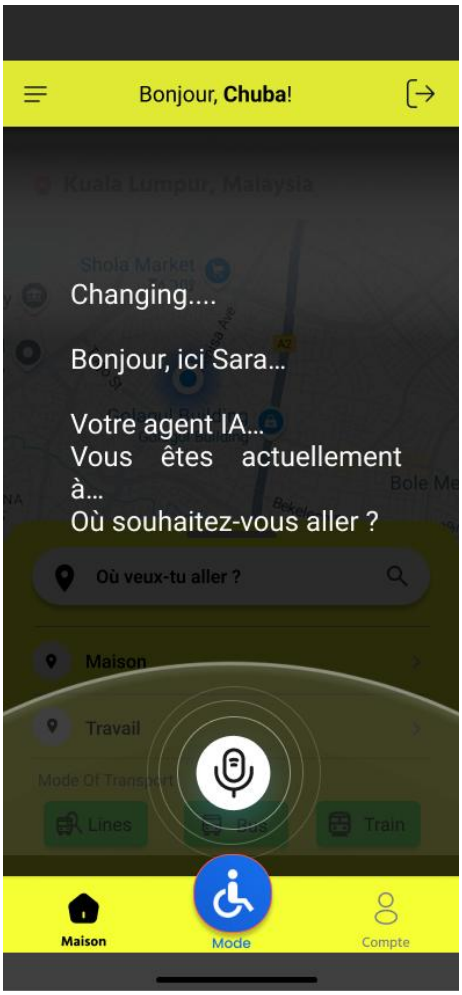
The AI Agent will then process the audio input, and will proceed to ask the user on what language to be changed.

4.5.3 User choses language - User



Then the user will then say the language name like “French”.

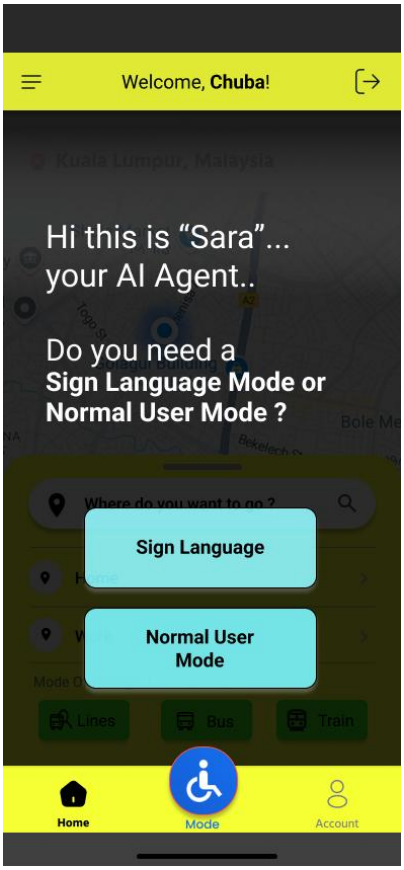
4.5.4 Language changed - AI Agent Voice



Then, the AI Agent will then process the input and then proceeds to change the system's language. Then the user has to interact with the system with their preferred language like in French.

Hearing/Speech Disabilities

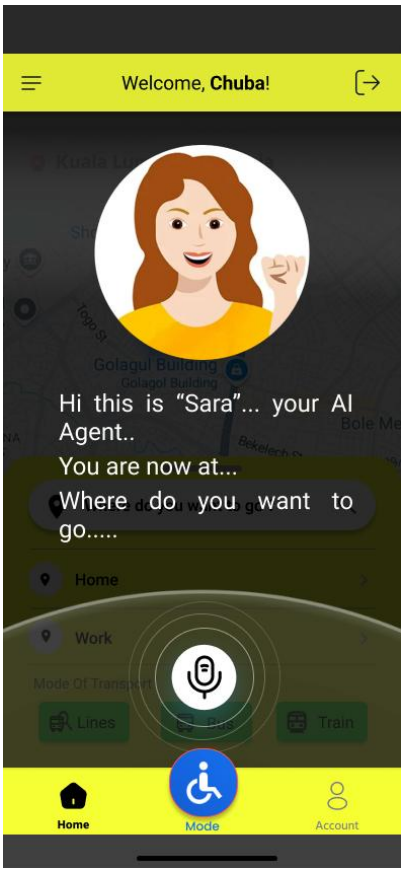
5.0 User choose options - Hearing Disabilities



If the user taps the “hear” or “Lips” button, the system’s mode will be changed to Hearing Disability’s mode and they will be navigated to the Hearing Disability UI as shown in the screen above. This mode will be handled by Gemini AI Assistant. The agent will introduce itself and ask if the user chooses a “Sign Language Interpreter Mode” or “Normal User Mode” and users will have to tap the options.

This was introduced because we can assume that some of the user’s that have hearing or speech disability may not have visual disability. So those who can see visually can choose to use the “Normal User Mode”

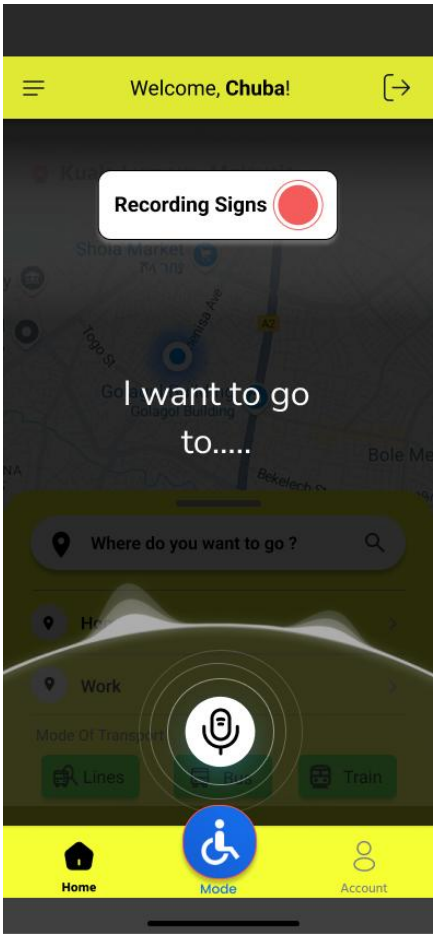
5.1 User choose options - Hearing Disabilities



If the user taps the "Sign Language Mode" button, the system's mode will be changed to Hearing Disability mode and they will be navigated to the Hearing Disability UI as shown in the screen above. This mode will be handled by Gemini AI Assistant. The agent will introduce itself an announce the live location of the user. Then the AI Agent called Sara will ask the user on their destination location. The announcement will also be interpreted as a Sign Language through the AI Avatar.

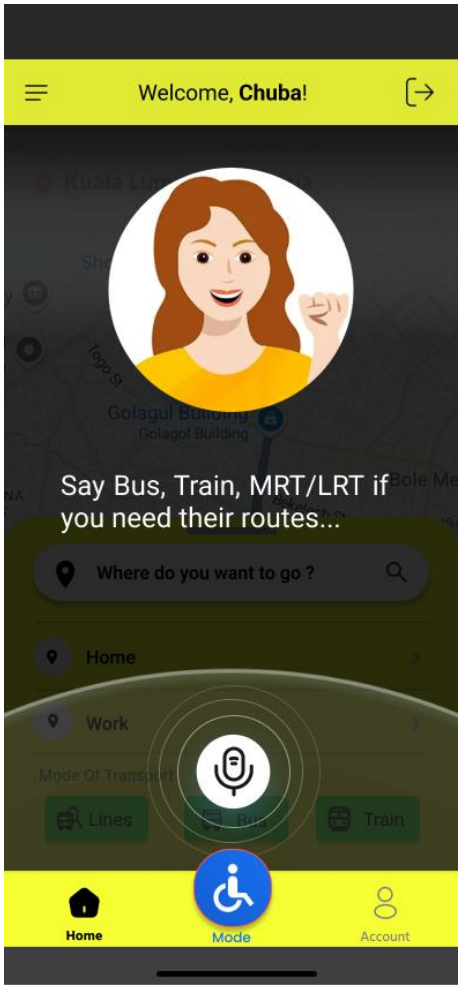
5.2 Journey (Option 1)

5.2.1 Replied Destination - User Speak to reply



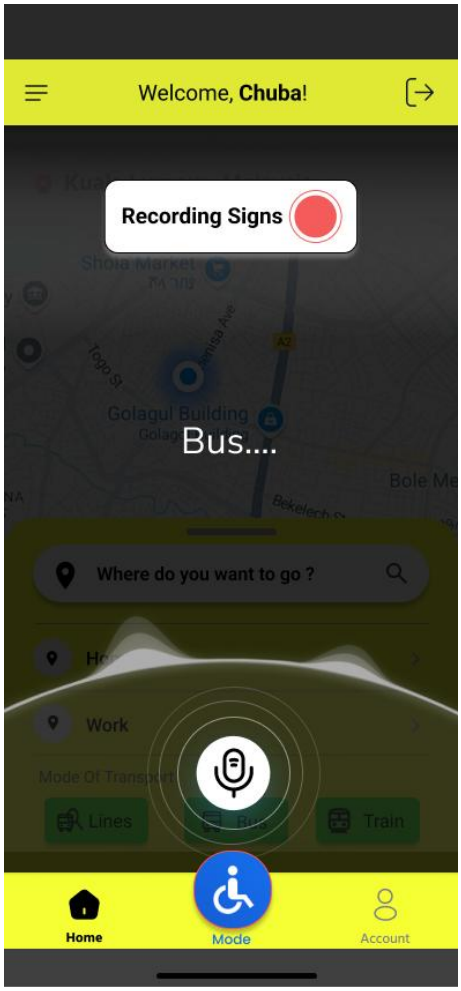
The user can speak to the AI Agent regarding where he/she wanted to go to or destination location. The user can also use their sign language to explain their instructions. The system will then records the user's signs and process to translation.

5.2.2 Choose Transport Options - AI Agent Hear



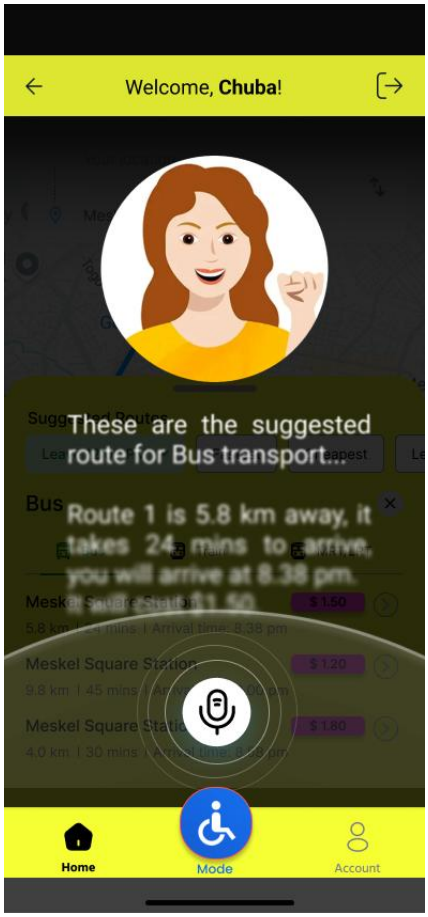
The AI Agent Sara will process the user's input audio and ask the user about the "mode of transport" before suggesting the best routes through audio or sign language.

5.2.3 User choose Bus - User Speak to reply



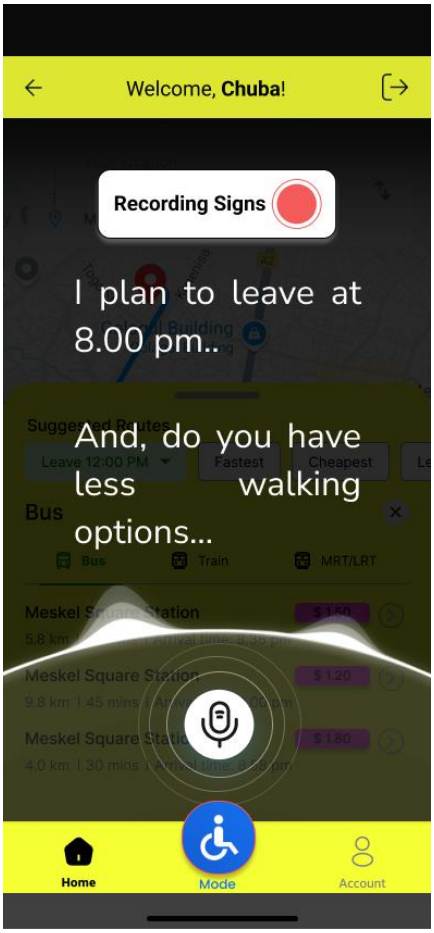
The user will say or show signs of their preferred mode of transport.

5.2.4 Find Best Route for Bus Transport - AI Agent Hear



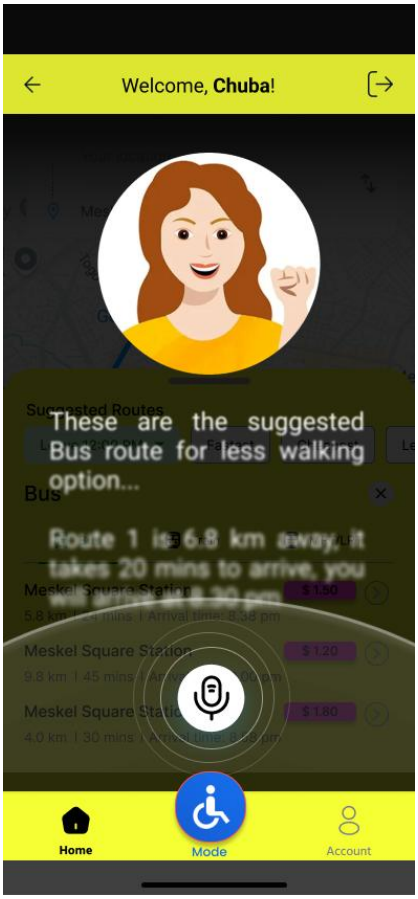
The user will process the input audio and recorded signs and explain or show signs of the routes available and its full details such as the distance, journey time taken, arrival time and travelling cost. These details will be based on the mode of transport that the user has chosen. Then the AI Avatar/Agent will pause and wait for users respond.

5.2.5 User changes route preference - User Speaks



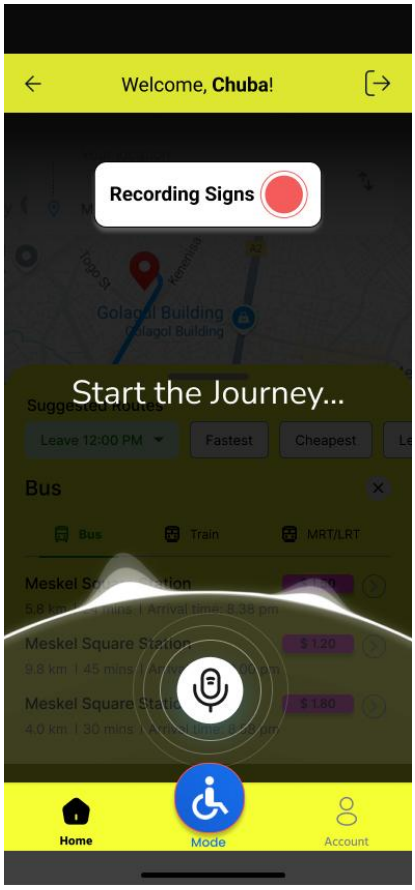
The user will then allow to say or show signs about what time they plan to leave/ start their journey and other options if they want, such as less walking options.

5.2.6 Regenerate Best Route for Bus Transport - AI Agent Hear



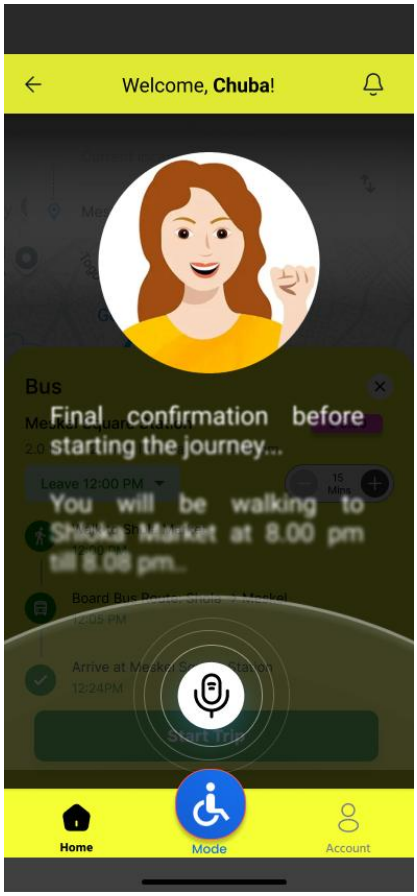
The AI Agent will process the user's input audio or signs and will recalculate the route based on user's preference and explain the available route again. Then the AI Agent will pause to hear the user's respond.

5.2.7 Start Journey - Speak to reply



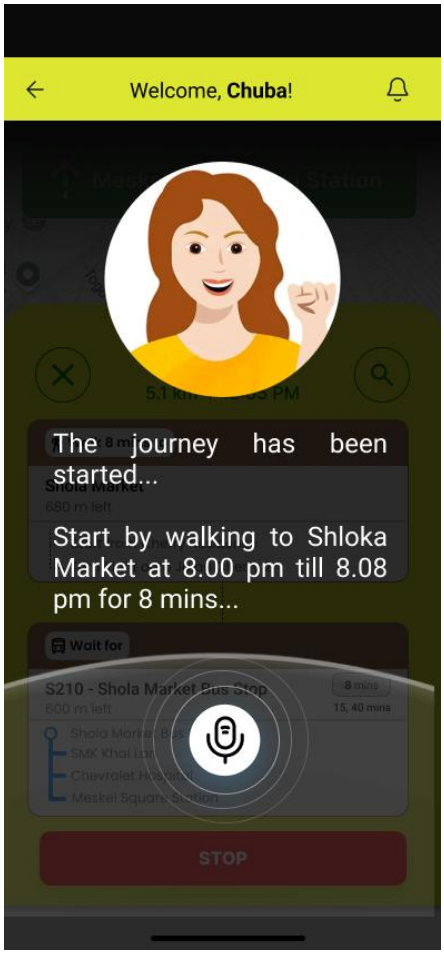
If the use is satisfied with the selected route, they can say “Start the Journey” or show signs to start the journey or keep negotiation with other preference.

5.2.8 Final Route Confirmation before start - AI Agent Hear



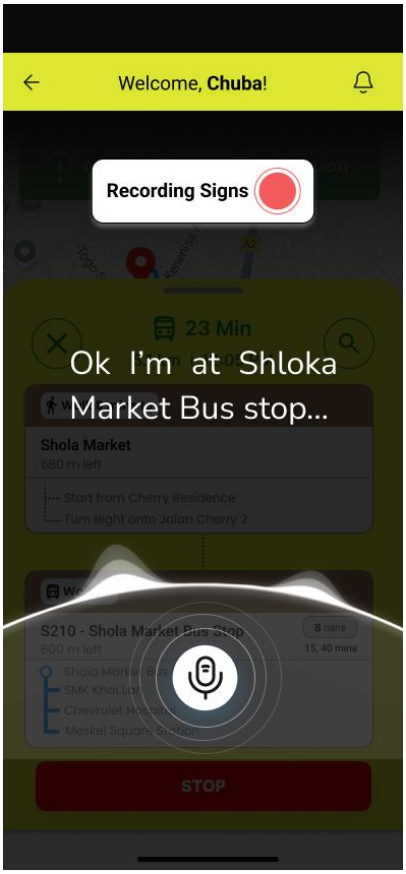
After hearing or seeing the signs, the AI Agents will announce the full details of the final chosen journey before the system starts the journey.

5.2.9 AI Agent Guides the Trip - AI Agent Hear



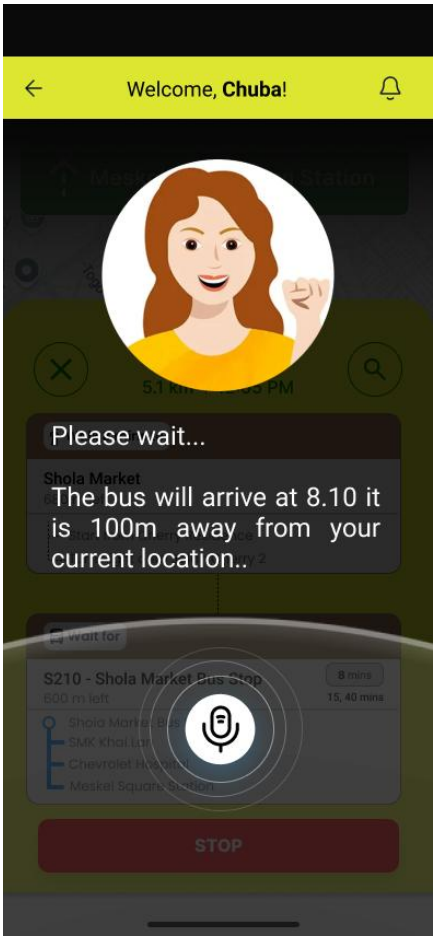
Then the journey will be started by the system and the AI Agent will be guiding the users verbally or through signs throughout their journey.

5.2.10 Updates location - User Speak to reply



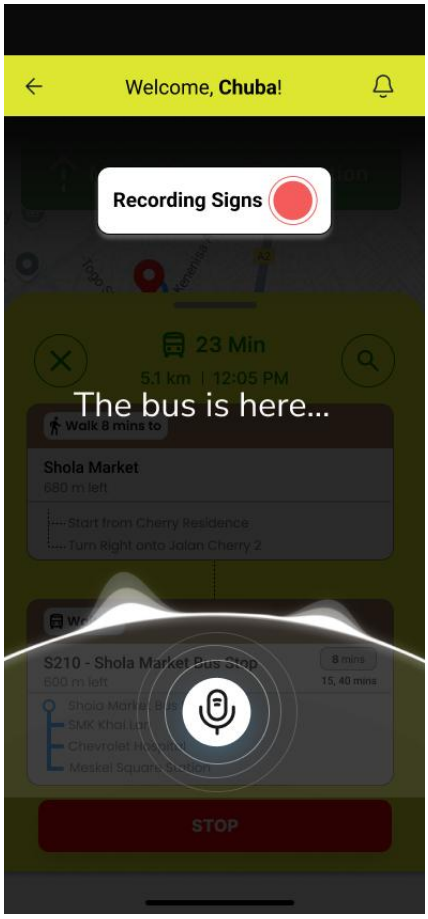
Then the user will reply with their every action to the AI Agent.

5.2.11 AI Agent Guides the Trip 2 - AI Agent Hear

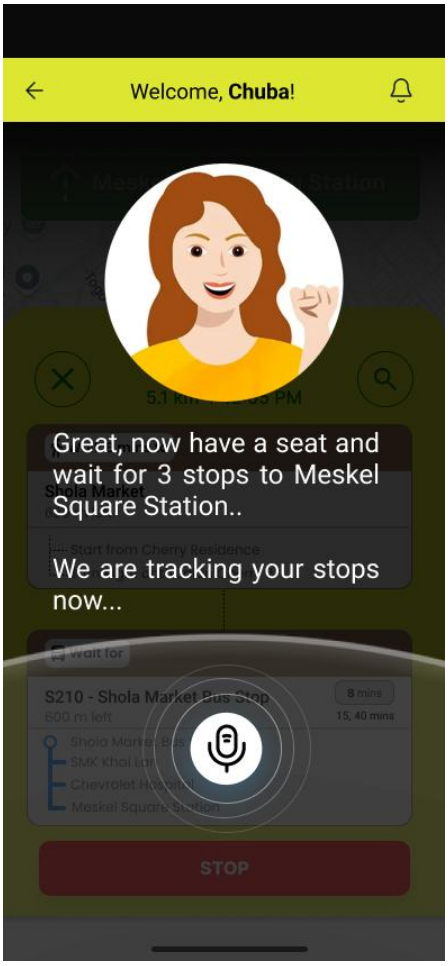


After hearing or seeing the signs of the current status of the user, the AI Agent continue guiding the user towards the end of their journey.

5.2.12 User Updates Bus arrival - User Speak to reply

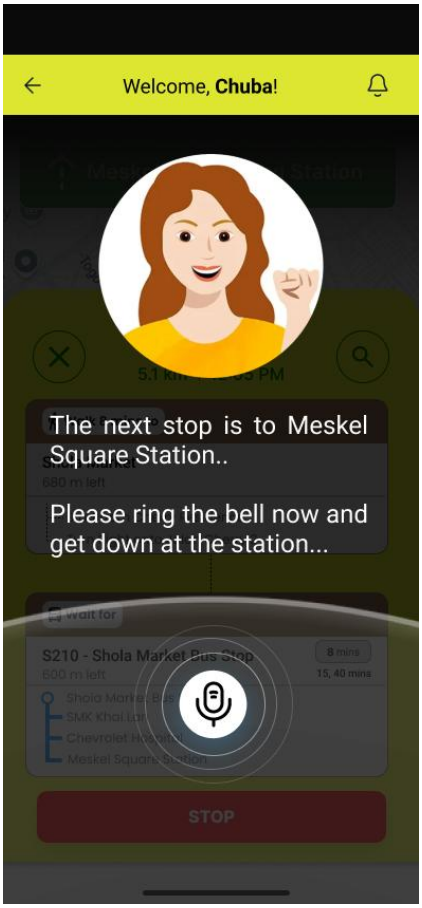


5.2.13 AI Agent Guides the Trip 3 - AI Agent Hear

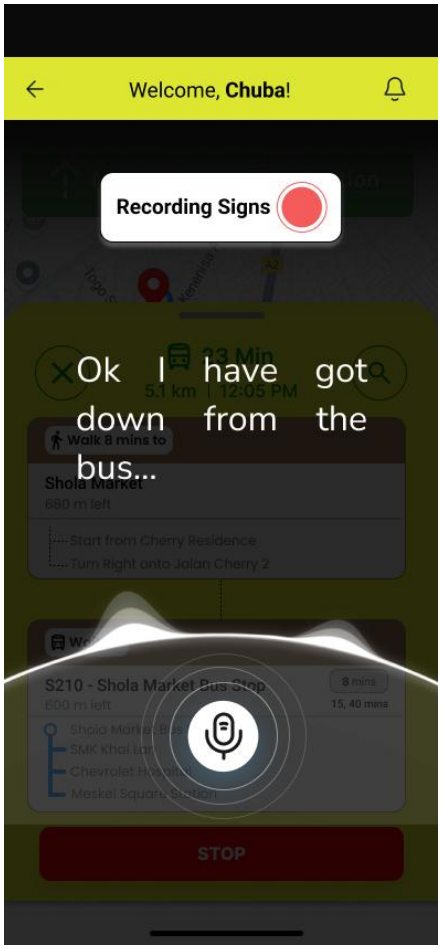


When the user has got into the bus, the system will be tracking the user's current location/bus station checkpoint to guide the user to get down at the current bus stop to arrive at the correct destination.

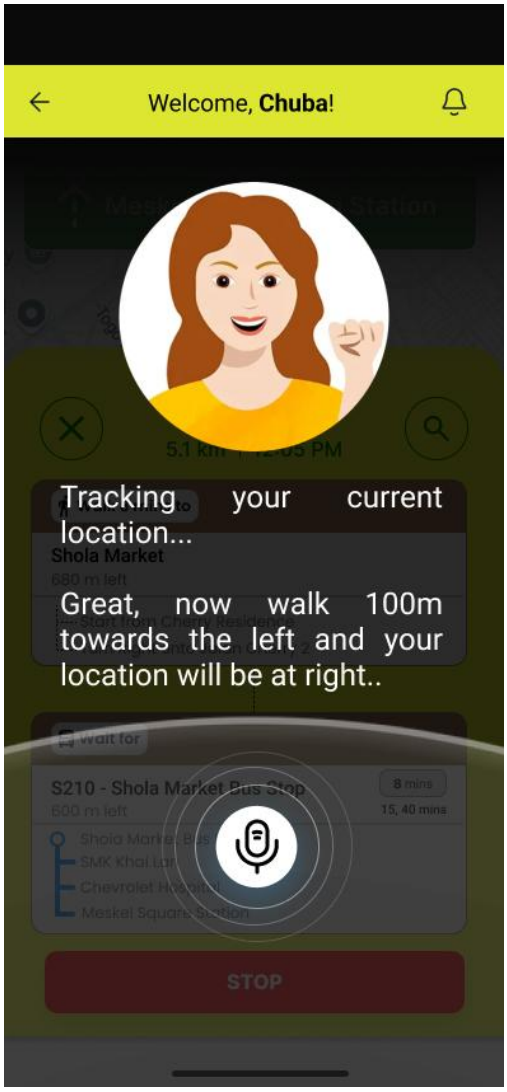
5.2.14 AI Agent Alerts Bus Stop - AI Agent Hear



5.2.15 User updates location - User Speak to reply

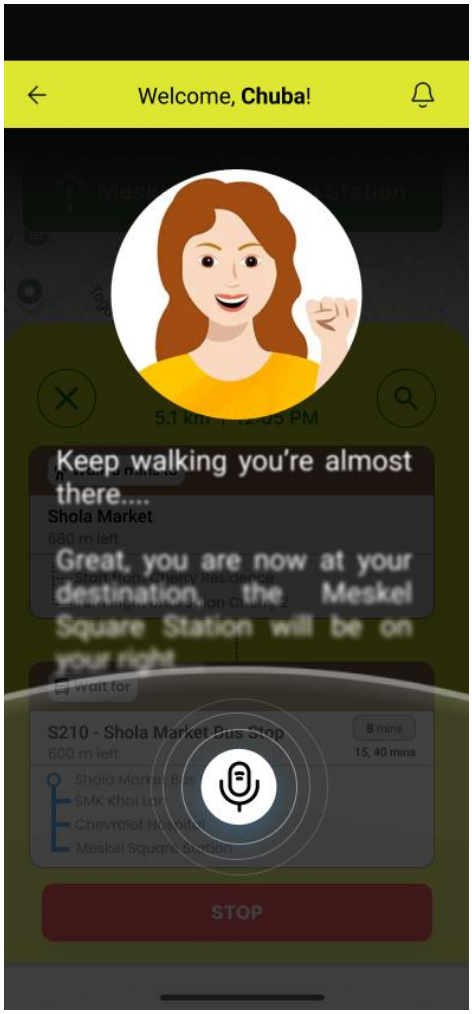


5.2.16 AI Agent Guides the Trip 4 - AI Agent Hear



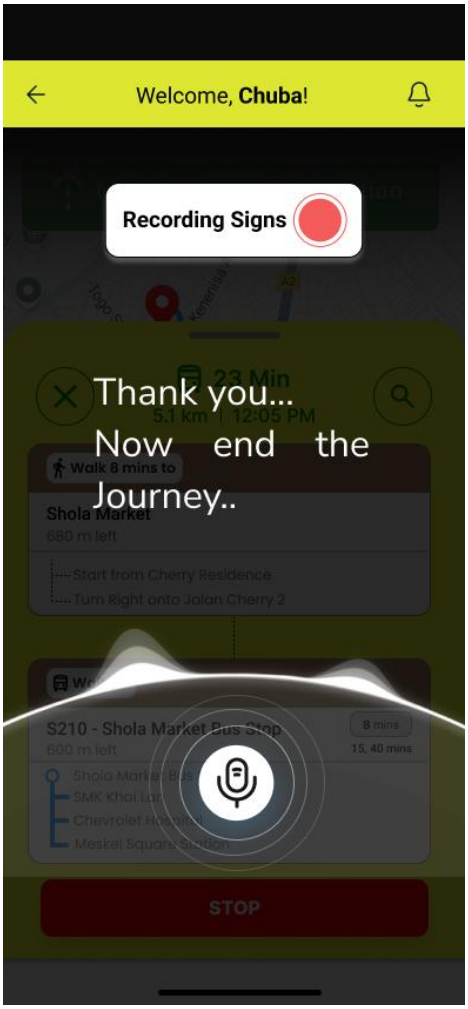
When the user has got down from the bus at the bus stop, the system will calculate the user's current step and then keep guiding the user.

5.2.17 AI Agent Guides the Trip 5 - AI Agent Hear



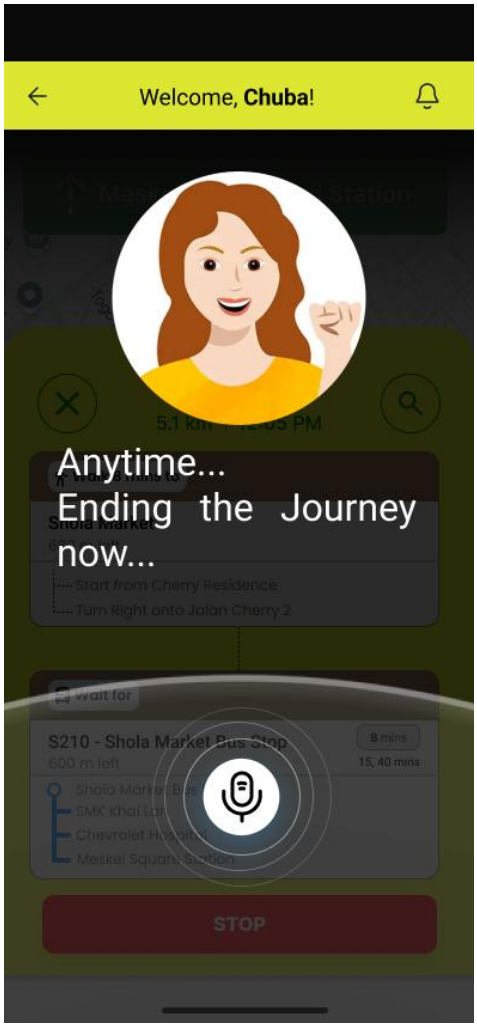
Once the user has arrived at the destination the system will track the user's current location to confirm. Once confirmed the AI Agent will announce to the user that they have successfully arrived at their destination.

5.2.18 User Thank AI Agent - User Speak to reply



Once the user has arrived, they can say “End the Journey” or show signs to exit the journey.

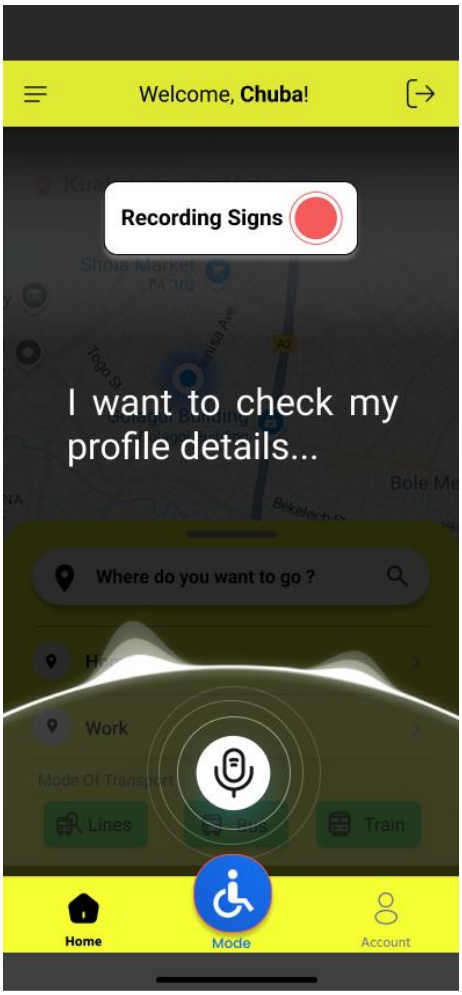
5.2.19 AI Agent Ends Trip - AI Agent Hear



The system will track the user's current journey to confirm if the user has arrived at the destination and will end the journey.

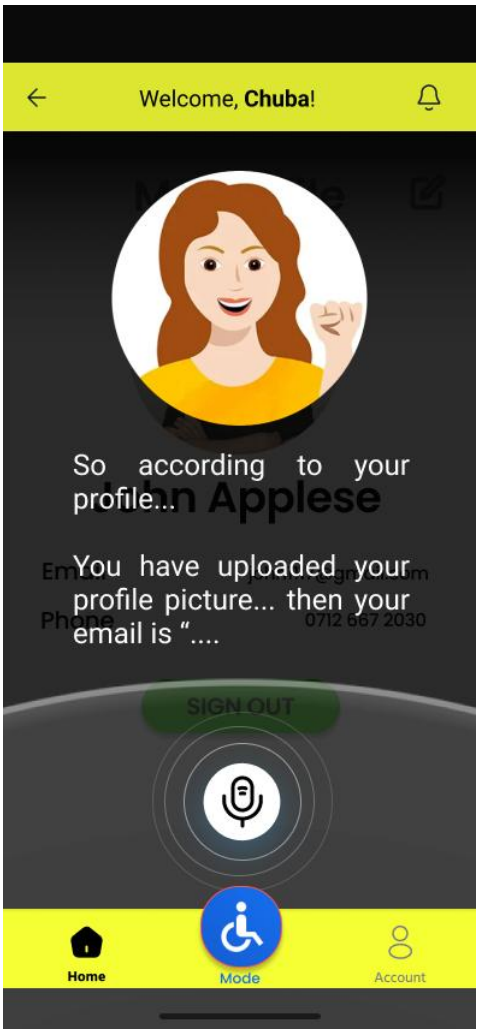
5.3 Editing (Option 2)

5.3.1 Navigate to Profile Page - User Speaks



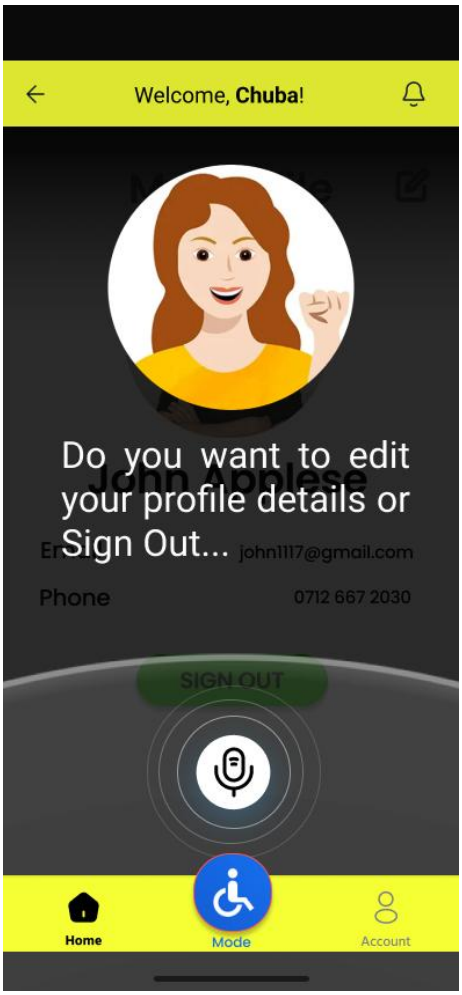
The user can speak or shows signs through the recordings to the AI Agent that they wanted to check the profile details.

5.3.2 AI Agents Speaks Profile Details - AI Agent Hear



The AI Agent will then explain to the user about their profile details that they have stored in the system.

5.3.3 Edit/Sign out - AI Voice Hear

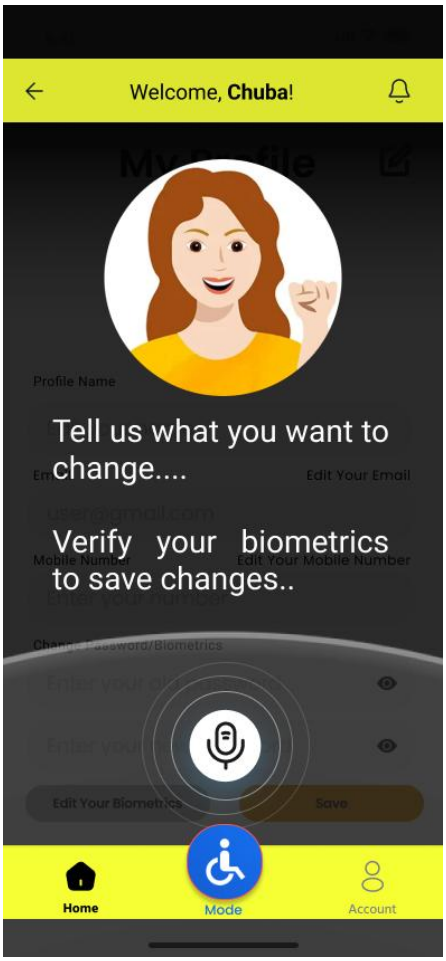


Then the AI Agent will ask the user if they want to edit their profile details or Sign Out.

5.3.4 Edit profile - User Speaks

The user can ask verbally to edit the details and the system will change their profile details according to their request.

5.3.5 Asking what to change - AI Agent Hear

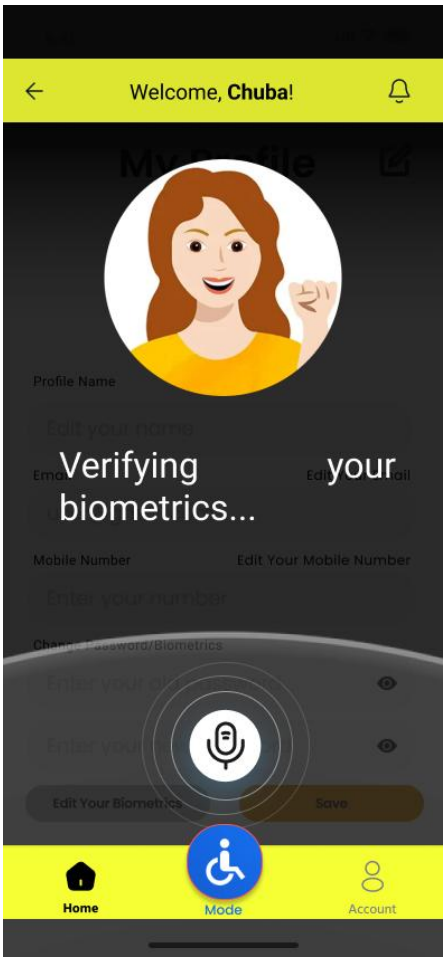


The AI Agents will process the input and reply with what details the user wanted to change.

5.3.6 Change Email - User Speaks

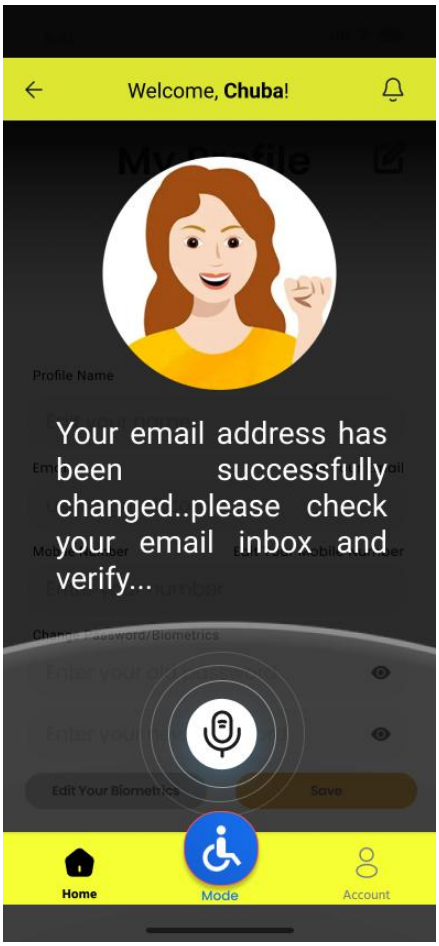
The user will say or shows signs of the details that they wanted to change such as the email address and verify their biometrics for the system to validate if they are the authorized user.

5.3.7 AI verifies Biometrics - AI Agent Hear



The system will then process the input audio and signs and verify the input biometrics.

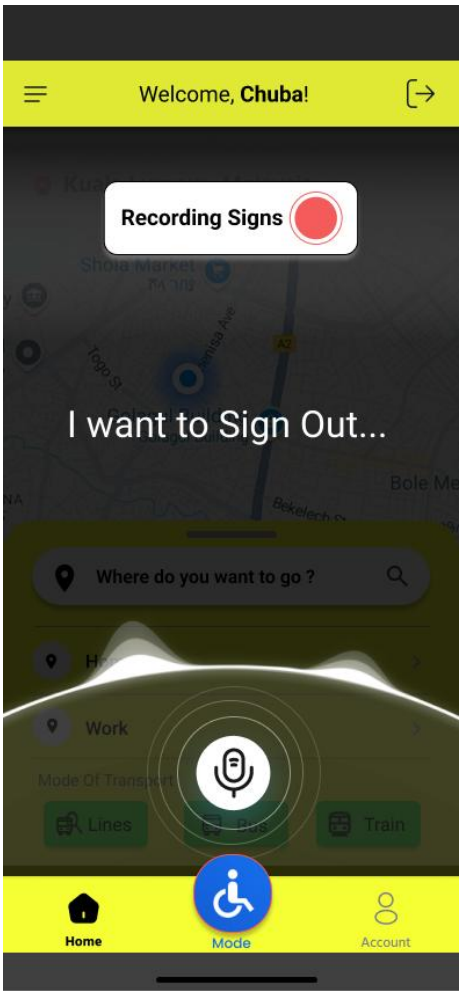
5.3.8 Email Address Changed - AI Agent Hear



Then, the AI agent will process the input audio and change it accordingly. Then, it will announce the user about the new email, so that the user can change it if it's wrong.

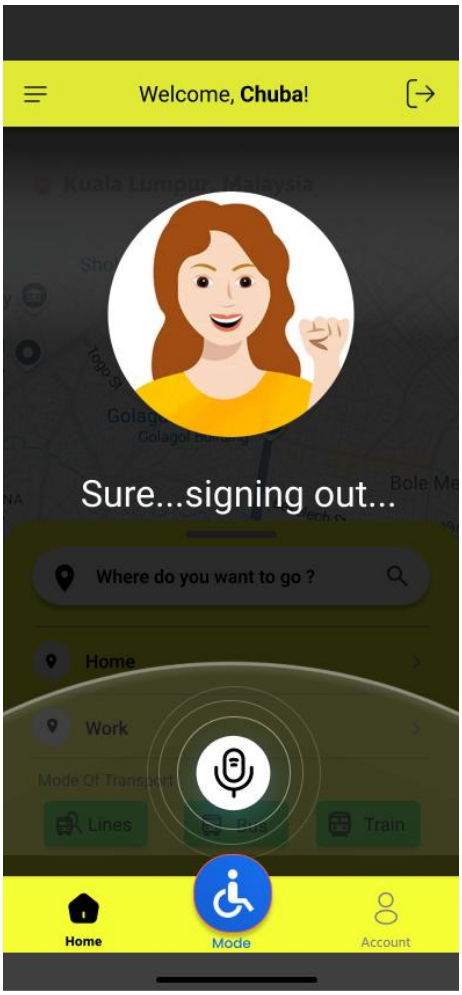
5.4 Sign Out (Option 3)

5.4.1 User Speak to Sign Out - User Speaks



The user can speak or show signs to the AI Agent that they wanted to sign out.

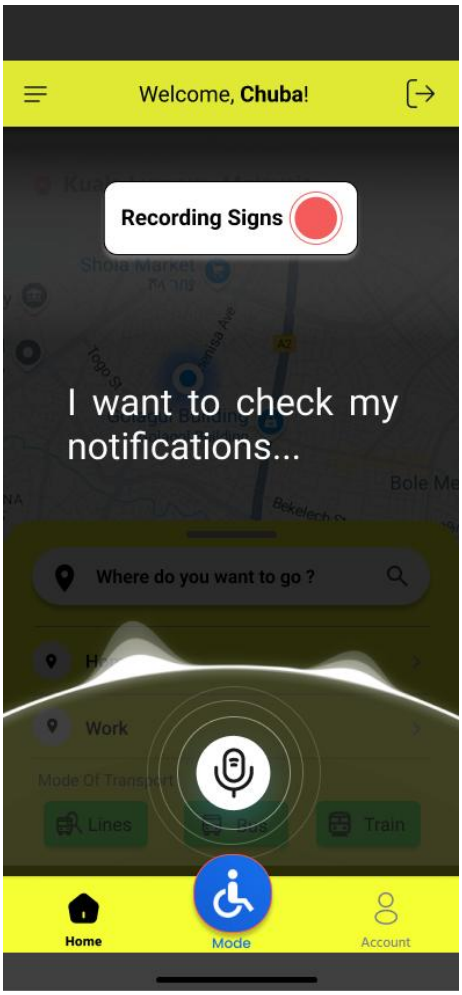
5.4.2 Sign out - AI Agent Hear



The AI Agent will process the input audio and signs the user out form the system.

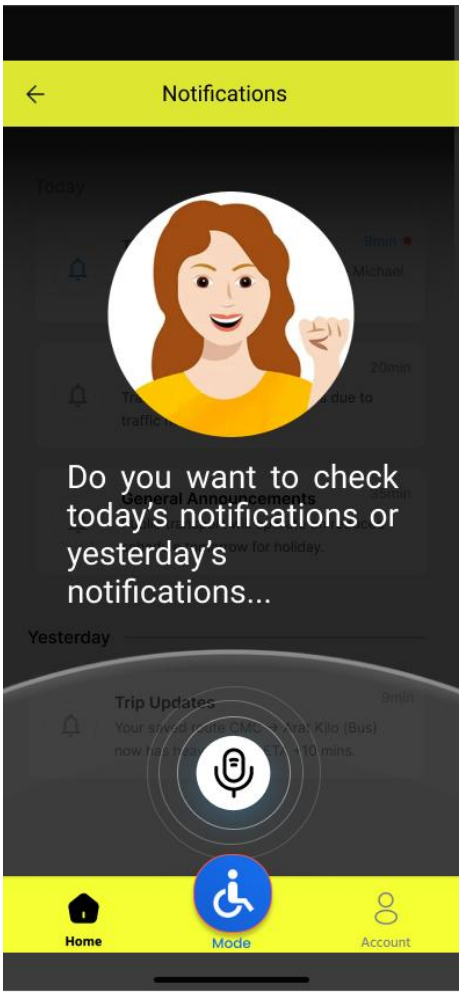
5.5 Notification (Option 4)

5.5.1 User Speak to navigate to Notifications - User Speaks



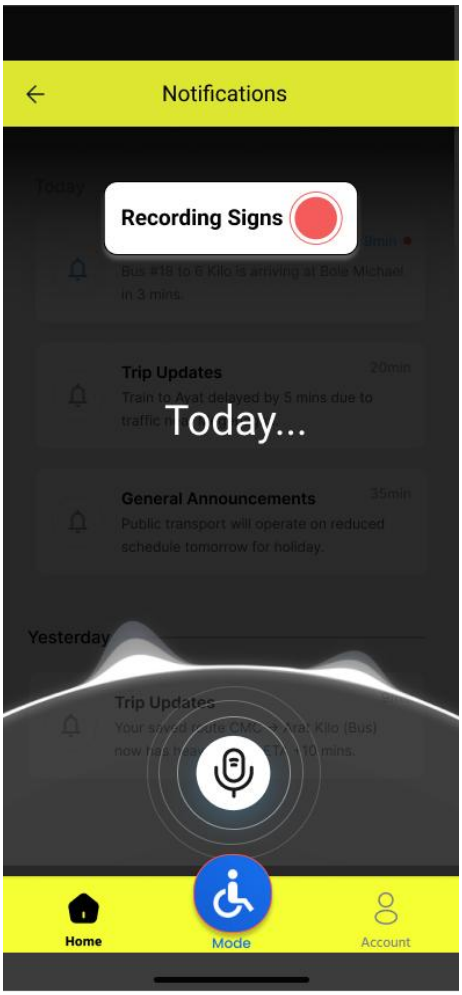
The user can speak to the AI Agent to check the notifications.

5.5.2 AI ask for which Notifications - AI Voice Hear



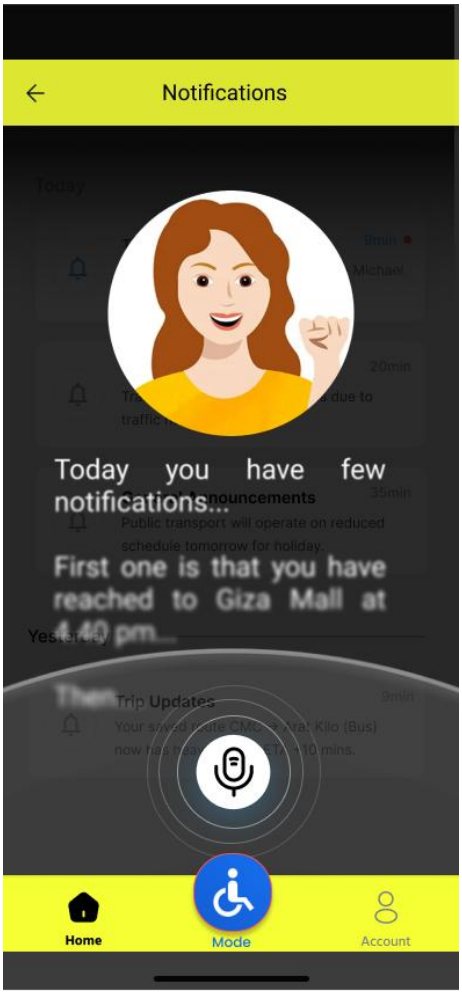
The AI Agent will them ask the user about the timeline of the notification that the user wants to know.

5.5.3 User ask for Today's Notifications - User Speaks



The user will reply with the notification timeline.

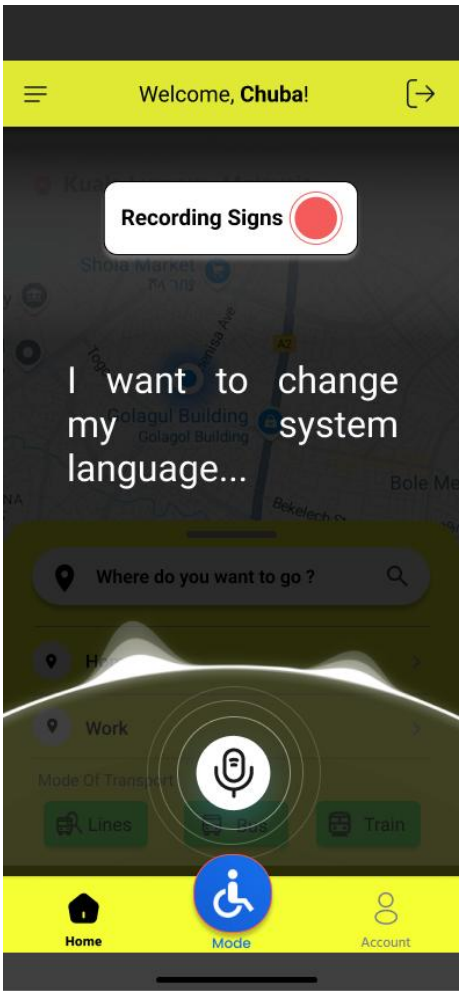
5.5.4 AI explains the Notifications - AI Voice Hears



The AI Agent will then announce the notifications details from the timeline that the user requested.

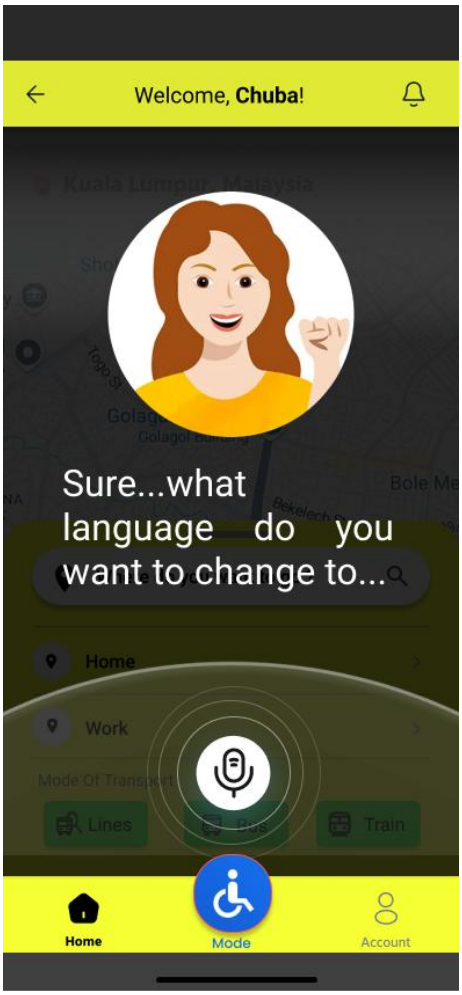
5.6 Change Languages (Option 5)

5.6.1 User Speak to change language - User Speaks



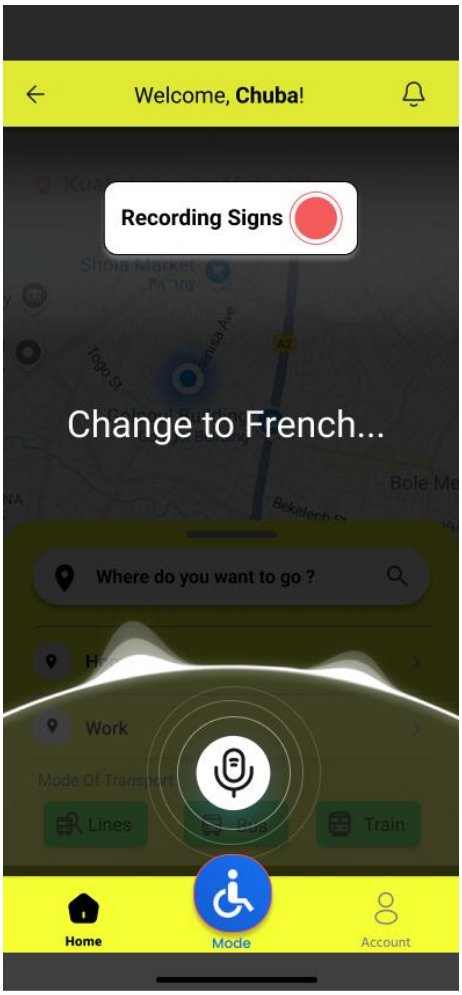
The user can speak to the AI Agent that they wanted to change the system's current language to their desired language.

5.6.2 Request which language - AI Agent Hear



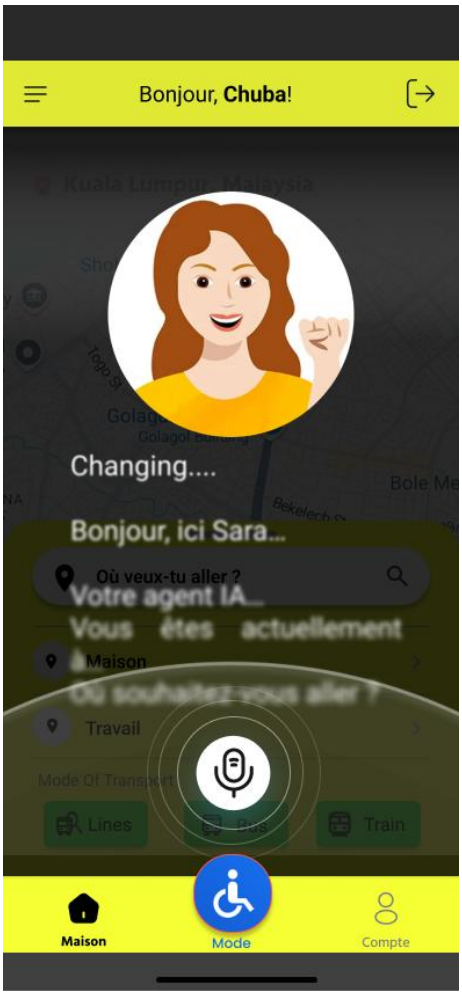
The AI Agent will then process the audio or recorded signs input, and will proceed to ask the user on what language to be changed.

5.6.3 User choses language - User Speaks



Then the user will then say or shows signs of the language name like “French”.

5.6.4 Language changed - AI Agent Hear



Then, the AI Agent will then process the input and then proceeds to change the system's language. Then the user has to interact with the system with their preferred language like in French.