

User's Manual

YouSee

for Visually Impaired Community

http://www.utdallas.edu/~jsh170830/index.html

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Revision Sheet

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| Rev. 0 | 11/05/21 | User's Manual Created |
| Rev. 1 | 11/15/21 | Added modifications to System Configuration |
| Rev. 2 | 11/28/21 | Edited Acronyms and Abbreviations |
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USER'S MANUAL

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1.0 GENERAL INFORMATION

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1.1 System Overview

YouSee is an iOS and Android OS mobile app oriented for the UTD visually impaired community. The application pairs the blind user with a volunteer from our app and have him/her help maneuver and navigate through the ground floor, which consist of classrooms, washroom, offices, etc. The user will have the option to have a person on spot, a person remotely, or utilize the application itself to navigate through a building with various features such as object recognition, voiceover, talkback, and a GPS system build within it.

There will be two types of users, a blind person, and a volunteer. Both parties will need to register to have an account. The set-up process for both types of accounts will be different. The blind person will partner up with someone they know to help configure their account to their best needs. However, the volunteer will have to go through a background check to help ultimate malicious and untrustworthy activities. Once they are verified, they will start and have reviews to stay concurrent with a positive journey for the blind users.

1.2 Acronyms and Abbreviations

iOS: Apple mobile operating system created and developed by Apple Inc.

UTD: University of Texas at Dallas

Android OS: An operating system for mobile phones developed by Google

App: Application, typically referring to mobile applications

2.0 SYSTEM SUMMARY

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2.1 In-Person Volunteer

If the blind person wants an in-person volunteer, they must get in queue to search for a volunteer. Once the volunteer is available and accepts the request, the user's location and emergency contacts will be accessible to the person helping the blind individual navigate. The volunteer will then locate the blind person to help them navigate indoors.



2.2 Call Volunteer

If the blind person wants to meet with a call volunteer, they can specifically skip the in-person queue and join the call queue. Once the assisted individual connects with a remote agent via facetime, the route will be shared with the volunteer through the camera and GPS system. The live agent will act as the eyes and ears for the blind person to help them navigate indoors in a building.

In a case where the blind person experiences any emergency issues, both parties will have the ability to contact law enforcement and healthcare to provide further support.

3.0 GETTING STARTED

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3.1 Home Page

The User starts by first selecting if they want to either be a volunteer or to be assisted.

| ¢ | Settings | |
|---|-----------------------------------|--|
| | I'd like to volunteer | |
| | l'd like help from a volunteer | |

-Click the "Settings" button to configure the account -Within settings you have these 4 options

- Account
- Privacy and Security
- Help and Support
- About

3.2 During a call





"Search" which would queue the user into searching for a volunteer until the request have been accepted. While in queue the smartphone will ring during that duration and timeout after 3 minutes when the request hasn't been accepted.

The application will go back into searching until a suitable partner have been connected. Once the connection between the user and volunteer have been accepted, the smartphone will respond with "Connected" along with a vibration. At this point, the partner instructs and aid the user to his/her desired location within the building.



The user should be pointing their smartphone outward for the volunteer to give exact real-time instructions. If a sudden incident happens to the user, there is a button labeled emergency that dials 911 call to provide quick access to an emergency dispatcher. If the application closes there will be a distinct noise and vibration in which the user knows that they are not on the application.



After the user hangs up, both parties will have the option to submit feedback.