

# GLASS TODO

ASHWINI . DEEP . VARSHA

## DESIGN CHALLENGE

AN EASILY ACCESSIBLE SYSTEM TO  
CAPTURE NOTES WHILE BEING IN A  
CONVERSATION WITHOUT  
INTERRUPTING IT

## DESIGN GOALS

MINIMAL USER INTERACTION FOR INPUT  
EASY-TO-DO UPDATES

VIDEO

MINIMAL USER INTERACTION FOR INPUT



OK  
GLASS

TODO  
TASK

BUY MILK

1

2

3

4



1

OK  
GLASS

2

~~TODO  
TASK~~

3

BUY MILK

4

# IMPLEMENTATION

Bypassing "Ok Glass" by running service in background

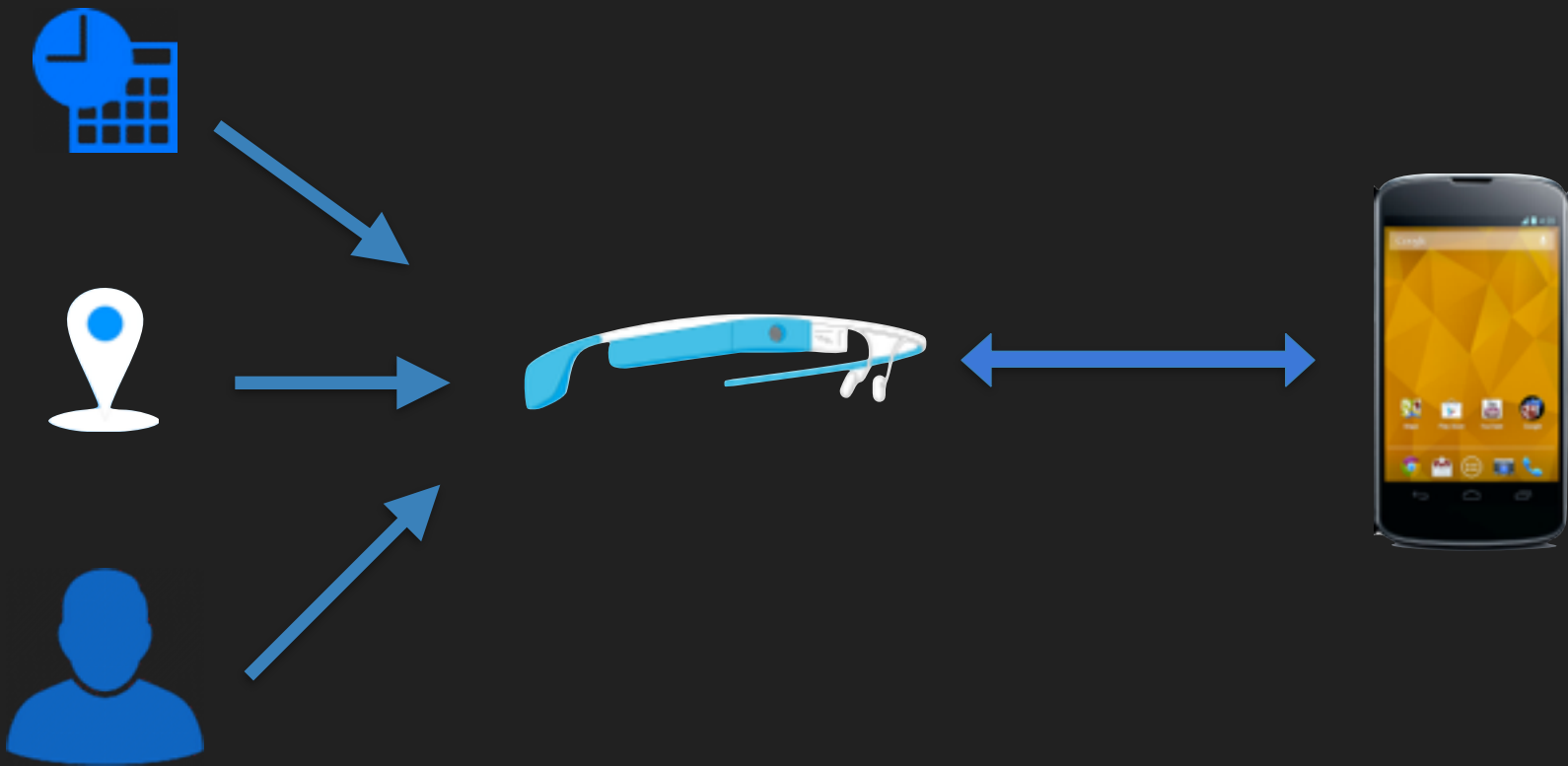
Listener only captured voice commands relevant to view in focus

Couldn't define custom "hot word"

Override "OK Glass" to trigger voice input for ToDo



EASY-TO-DO UPDATES

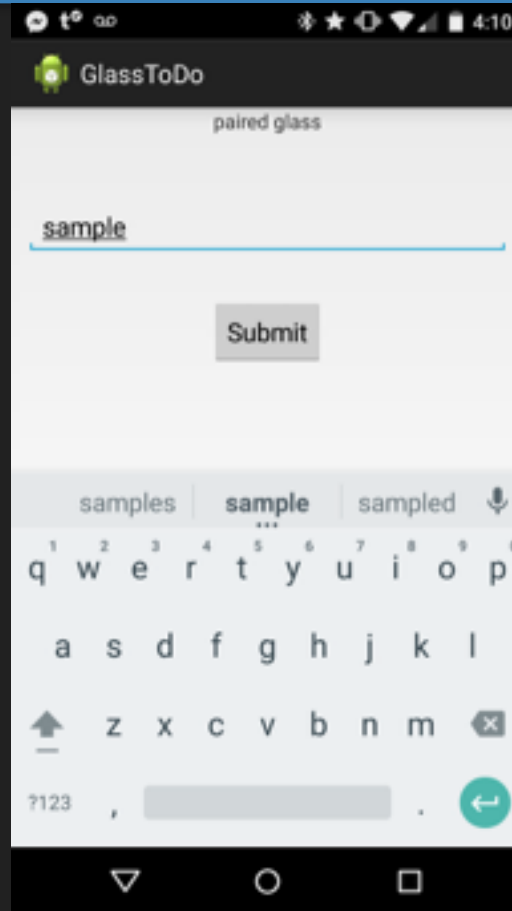


# IMPLEMENTATION

Communication  
through Bluetooth  
RFCOMM server

No internet  
connectivity required

Easier to rework using  
mobile keyboard



sample changed

tap for options

# USER STUDIES

# EVALUATION GOALS

Evaluate user input interaction techniques

- Ease of access

- Intrusiveness levels

Compare between

- Existing note taking applications

- Quick ToDo on Glass

- ToDo on Glass

Is reworking on task a required feature and potential ways to enhance it ?

# DEMOGRAPHY



Participants

9

Average Age

23

Education

MS/PhD (CS, ECE & Chemical) at Tech

Experience with Glass

0 to 3 times

Vision

Corrected Vision using Glasses

Glass Usage

On top of normal glasses (7)  
Standalone (2)

Exception

One participant used  
My Glass screencast

# METHODS

Pre-Test Semi-Structured Interviews

Post-Test Surveys

# FINDINGS - QUANTITATIVE DATA

## EASE OF ACCESS

ToDo  
3.2

Glass ToDo  
5.2

Most Easy  
1

Least Easy  
7

## INTRUSIVENESS LEVEL

ToDo  
3.1

Glass ToDo  
4.3

Least Distractive  
1

Most Distractive  
7



# FINDINGS - QUALITATIVE DATA - INTERACTION

## Situation

Number of notes and the description length e.g. *grocery list* versus *email id*

Whom you are conversing with e.g. friend versus professor

## Perspective

Typing - Rude to interrupt the other person while taking

Speech - Less effort

## Human Senses

Google Glass - Vision, Vocal and Hands

Typing - Part Vision and Hands.

# FINDINGS - QUALITATIVE DATA - REWORK/UPDATES

Possibility of reworking on captured notes is minimal

Rework might become easy if metadata like meeting, friendly location name, people or time is captured

# QUOTES

“Getting familiarized to Glass takes time”

“Writing while talking is way-way less intrusive than talking while talking”

“Capture notes by directly recording other speaker’s voice”

“Glass should be modified to fit on existing spectacles”

“Unstructured data should be captured”

“An imaginary keyboard should be projected from Glass”

QUESTIONS

GLASS TODO

THANK YOU

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