iVote by Likai Wei Zhuoran Duan Zixuan Fan

Overview



- iVote is a light-weighted iOS voting app on IOS 9.3
- It is implemented by BTLE (Bluetooth Low Energy)

Scenarios

- Classroom
- Meetings
- Wherever has no internet connection
- Decide what for lunch
- Anonymous polling
- o Etc.

No more iClickers





Main Menu: Create a new vote Join an ongoing vote



3:55 PM

Back

A BLUETOOTH VOTING APP



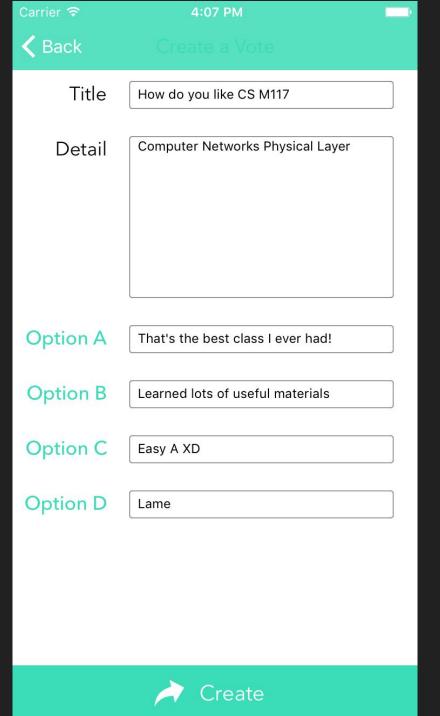
Create



Join

UI Walkthrough

Create Vote: Entering Vote Title Details & Options



UI Walkthrough

Vote Receipt: Review your vote and options Carrier 🖘 4:07 PM View Result **VOTE RECEIPT** MNNZ3UASJH How Do You Like Cs M117 Detail That's The Best Class I Ever H... Learned Lots Of Useful Mater... Lame

View Voting Result

Carrier **令** 4:08 PM ■

View Receipt

VOTE RESULT

A 0
B 0
C 0

Back to Menu

UI Walkthrough

Join an ongoing vote: Search for nearby votes Searching for Votes

4:09 PM



Choose an option

Carrier ❤









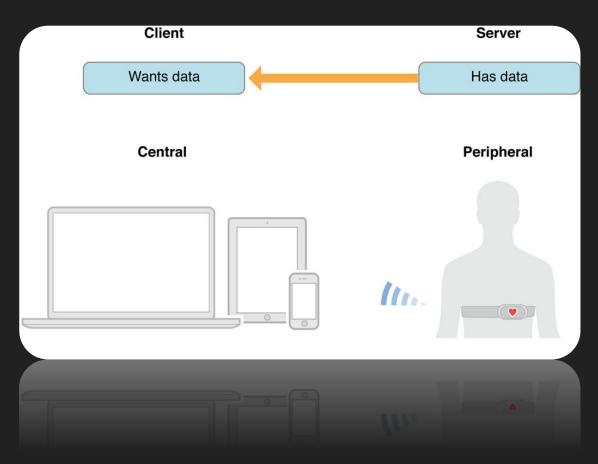


4:10 PM

Architecture Overview

- Why Bluetooth?
- Low Energy
- Does not rely on LTE/WIFI Connection (think about Boelter 3400)
- Cheap & Convenient
- Perfect for short range communication

Architecture Overview



- Central: Process & store data (e.g. iPhone)
- Peripheral: Collect and process data(e.g. Fitness tracker)
- In iVote: Central(Create Vote) Peripheral (Join Vote)
- A string is sent from peripheral to central, and central processes the string and counts

Live Demo & Video Demo

https://youtu.be/100Px5RPj-8

Limitation & Future Improvement

- Can only used for close range voting (within 100 meters)
- Bluetooth can only connect 8 devices at one time(not good for huge class like CS32).
- Add Central→Peripheral communication (To see what the options are during voting)
- More interactions and features (e.g. Voting History)

Thanks!

Github:https://github.com/kevinfan23/CSM117