

RaceTrace

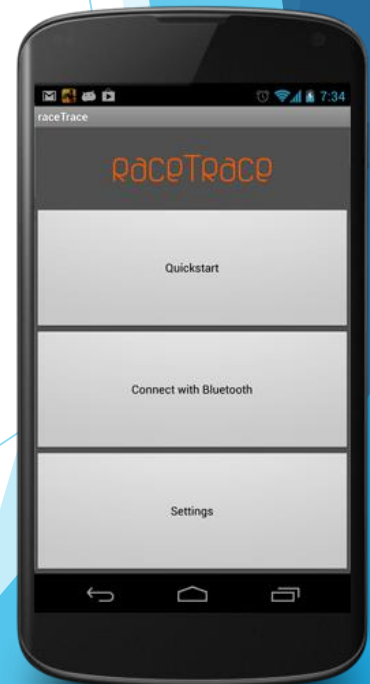
A real-time group tracking app

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Session Setup

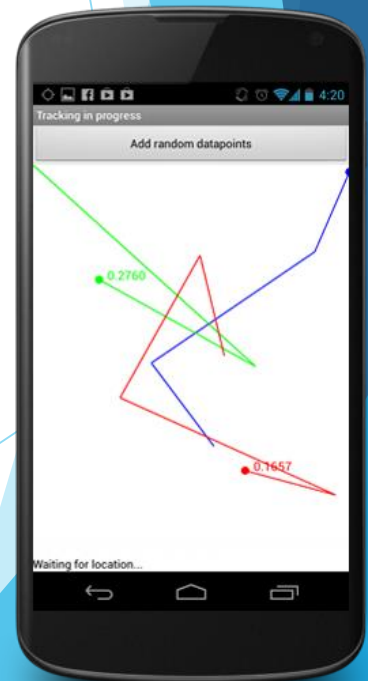
Two Methods:

- ▶ Bluetooth
- ▶ Coordinating server



Data Structure and Network Protocols

- ▶ Data Structure
 - ▶ List of (location, time) pairs (indexed by distance moved) for each device
 - ▶ Stored as ordered tree of gapless segments of data
- ▶ Client / Server
- ▶ Peer to Peer
- ▶ Data Requests



Next Steps

- ▶ Built with logging functionality
- ▶ Use recorded GPS traces to simulate real usage
- ▶ Test various protocol combinations with increasing levels of packet loss
- ▶ Analyse data from tests

