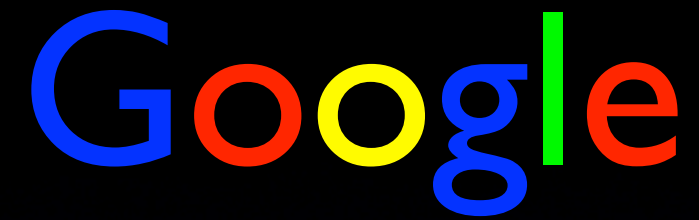


# Google

Chris Emery





- Wide range of technologies.
- Not just search and Gmail
- A few years ago, Google acquired Android inc and has turned Android in to a major smartphone platform



# Work Environment

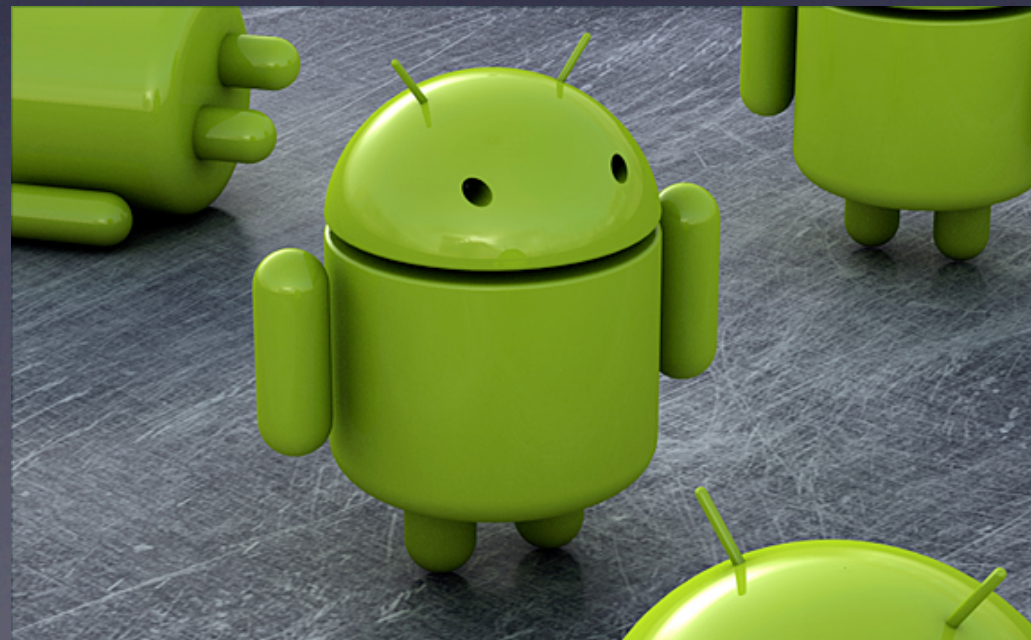
- Very relaxed
- Very multicoloured
- No set working hours
- Code reviews





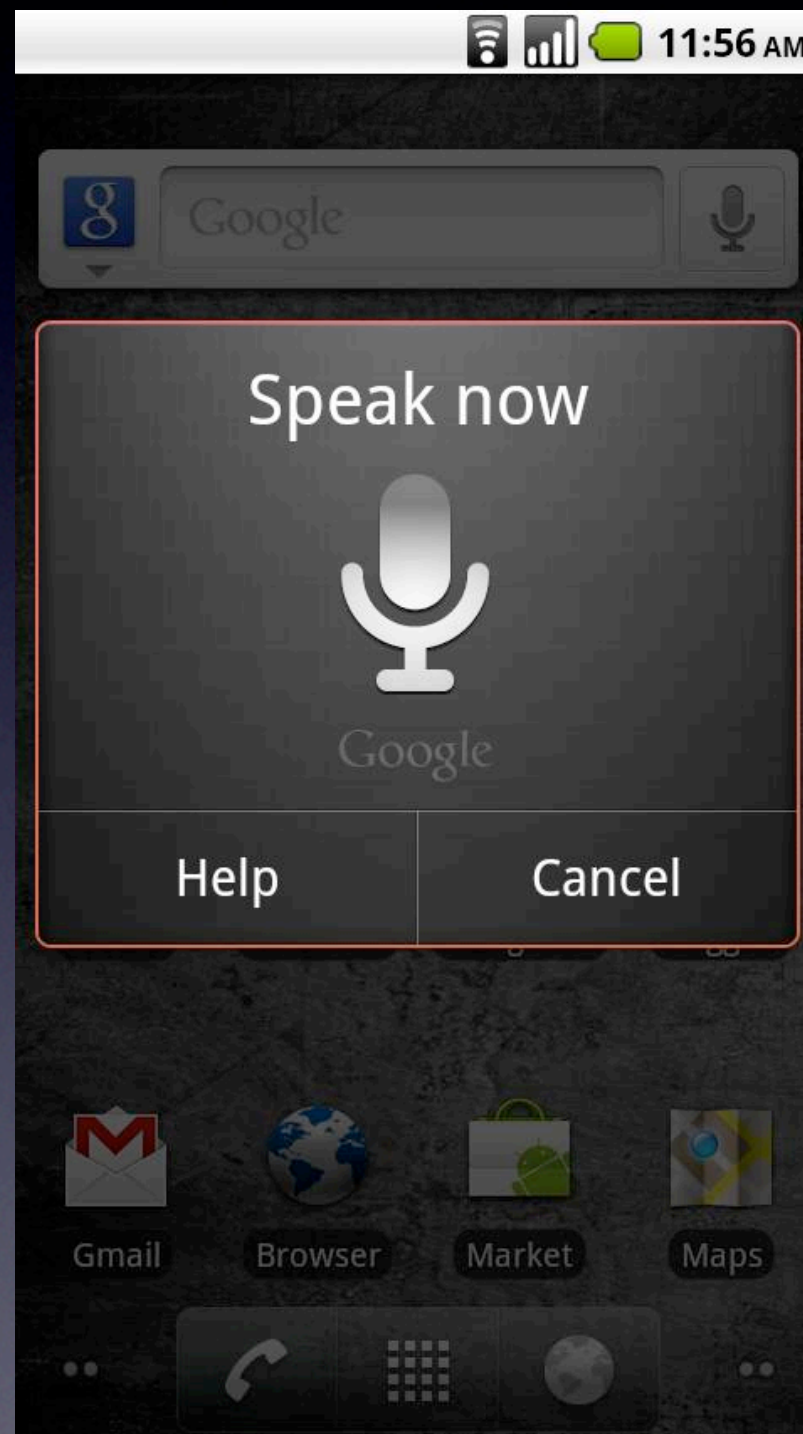
# Android

- “Java” running on top of a custom linux
- Completely Open Source
- Eclipse





# Voice Search





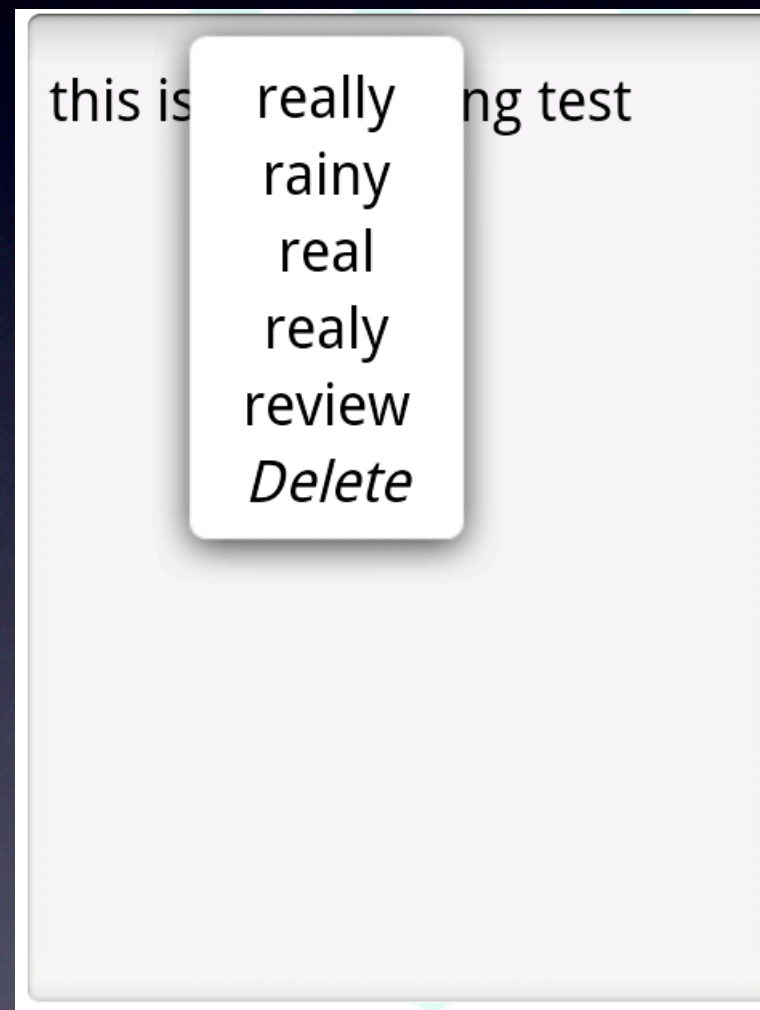
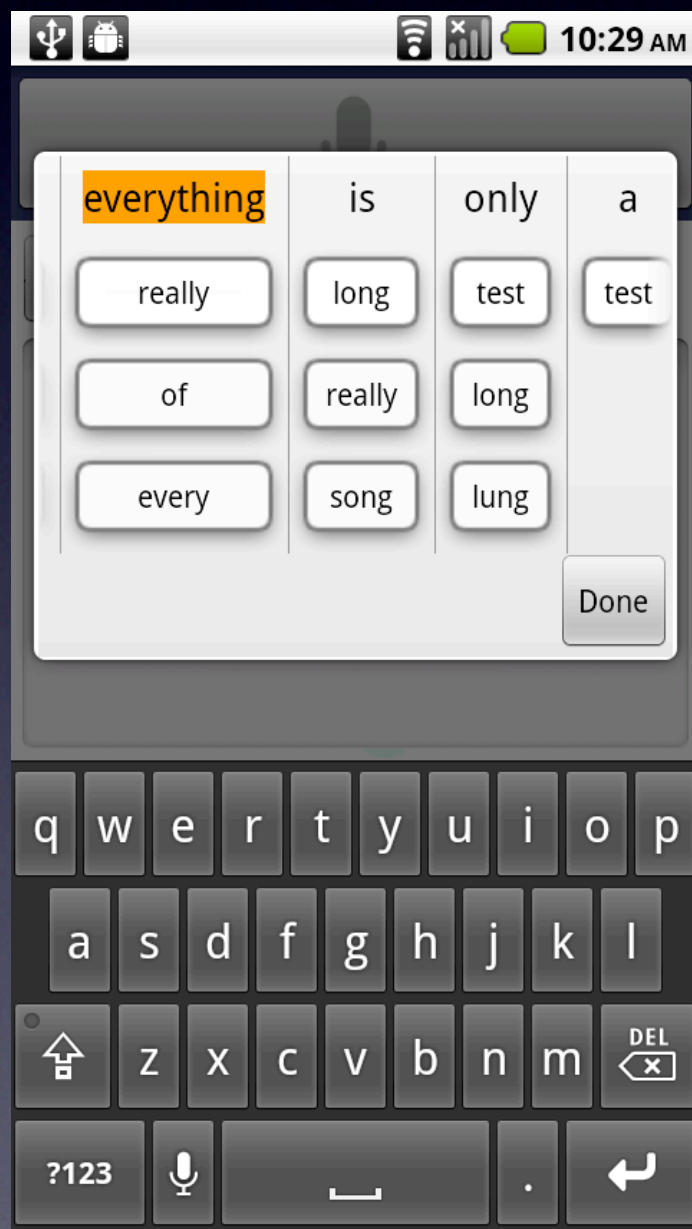
# Demo



# Voice Correction

- Currently voice recognition accuracy is around 70-80%
- Probabilistic recognition engine generates possible alternate recognitions for the phrase
- My main task: Research and develop the UI for voice correction for the new Voice Search

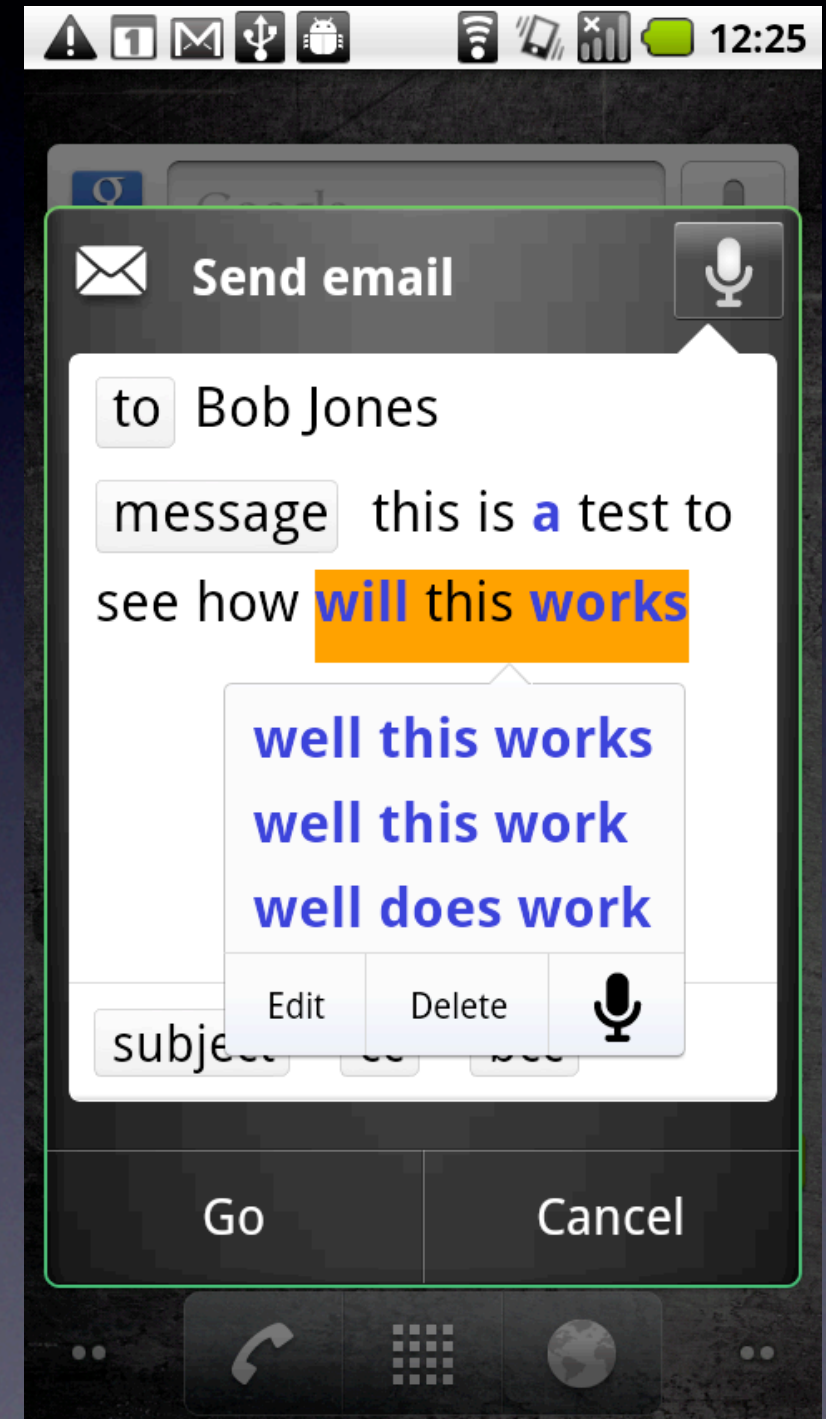
# Prototyping





# UI

- UI design is *hard*
- Complex user interactions





# Result

- Voice Actions was launched!
- Go get it on the Android Market if you have a phone running Android 2.2 (Froyo)
- Can't give you any hard numbers, but it's definitely a success



# Money

- How does this make money for Google?
- Voice Actions is currently unique to Android
- So is a differentiator that sells more Android phones...



# Money and Android

- Android is completely free and open source
- Deals between phone manufacturers and Google make Google money per device sold
- The phone manufacturers can then use Google branded apps on the phone, such as Gmail, Calendar, the Android Market, etc.



# Lessons

- Code Reviews improve code quality drastically
- UI design is hard, particularly in uncharted UI territory
- Working around framework bugs is common and very time consuming



# Questions?



# Thanks