

Planning an Open Source, Accessible Collaboration Suite



ACCESSIBLE OPEN COLLABORATION TOOLS

- interoperable
- modular
- adaptable
- secure + private
- "always on"
- degrades gracefully
- scales

FEATURES

- text chat - ^{real time}
 - audio
 - video
- enough resolution to be accessible

- ✧ text alternatives for audio, video + images
- Modular architecture + interoperable
- secure + private
- degrades gracefully
- scales
- ARCHIVE w/ error correction

TECHNOLOGY

- shared accessibility API access (cross platform)

THE VISION

TIME

- all the tools we need, but accessible
↳ SPACE
- Simple to use
 - annotations
 - easy control of time
 - captioning
- support for diversity
 - language
 - literacy
 - deaf + hearing
- user testing remotely
- simultaneous streams
- built in support for real people



MODES

AUDIO

TEXT

- chat
- real time annotations
- captioning
- * language
- ASL
- internationalization
- simplification
- + equivalents to audio/video

Quality

- signal-to-noise
- eliminate background noise

- frequency range
- * language

QoS

- lag
- multi-stream
- individual
- spatial distribution of person speaking

* equivalents

audio description and support for multiple streams

frequency shifting

VIDEO

- * language
- * equivalents

- bi-directional resolution + framerate
- signing
- lip reading
- finger pointing
- manage multi-streams

content + space (tools) + infrastructure

more than text/audio/video but of course those

open web desktop

stable secure robust

Logistics

- turn-taking/hand-raising
- lag among modes
- Speaker ID
- voting
- idea catcher
- private channel
- bi- + tri-modal
- pacing + control of time
- notifications + errors
- focus + zooming of modes
- auto-config / personal preference
- ↳ delivery context

Standards/Governance

SOLUTIONS

- equivalents
- participant correction
- control over timing - ability to pause real-time
- built-in assistance on demand
- user preferences
- mobile & variable bandwidth
- "touch and explain"
- speaker identification - synced to captions
- ability to raise/lower audio volumes

Priorities:

- common base (with respect to security)
- build out modules from there
- open web modular approach

Vision

- Exercise: Roadmap a project that we could build to solve our biggest issues
- Problem Statement

Build accessible open collaboration tools that are interoperable, modular and adaptable and support multiple streams of media.

“O’ CAT!”

Open Collaboration Accessible Tools

- interoperable
- modular
- adaptable
- secure & private
- “always on”
- degrades gracefully
- scales



Content

beyond

text

audio

video

Space

open

Web

Desktop

Infrastructure

stable

secure

robust



Text

- * chat
- * real time chat
- * annotations
- * captioning
- * equivalents to audio/video
- * multiple editors

Audio

- * Quality
- * signal to noise
- * eliminate background noise
- * frequency range
- * frequency shifting
- * lag
- * multi-stream
- * spatial distributions of person speaking
- * audio descriptions and support for multiple streams

Video

- * resolution and frame-rate for signing, lip-reading, finger spelling
- * bi-directional
- * manage multi-streams

Cross-cutting

- * language
- * ASL
- * internationalization
- * simplification
- * equivalents to audio/video/text

Logistical

- * turn-taking/hand-raising/queuing
- * lag between modes
- * voting
- * private communication
- * idea catcher
- * multi-modal presentation
- * pacing and control of time
- * notifications and errors
- * setup assistance
- * auto configuration & personal preferences