

Rich Malloy
 CSA 105
 Norwalk Community College
 Spring 2020

ZAPPING ZOOMBOMBERS: HOW TO MANAGE A ZOOM MEETING EFFECTIVELY

1

Website Shortcut

bit.ly/zoombomber

2

What Is Zoom?

- Zoom Video Communications, Inc.
 - HQ: San Jose, CA, 2011
- Started by former Webex engineer
 - Who thought Webex was too hard to use
- Company now worth \$40 billion
 - General Motors: \$28 billion
- Widely regarded as easiest video conferencing

3

Zoom Account Types

	Basic	Pro	Business
Cost	Free	\$14.99/mo	\$19.99/mo
Participants	100	100	300
Max Length	40 min	24 hrs	24 hrs
Extras	None	Advanced meeting controls	Advanced meeting controls
		1 GB of recording space (~1 hr)	1 GB of recording space (~1 hr)
			Dedicated phone support
			Company branding

4

Effective Zoom Meeting Management



5

SECURITY



6

Zoom Problems

- Lack of security
 - Zoom created a hidden web servers on Macs
 - Made it difficult to remove
 - Encrypted, but key stored in China
 - Warning from FBI (March 2020)
 - Investigated by NY State Attorney General
 - Banned from NYC schools
- Zoombombing

7

Zoombombing

- Hackers join and interrupt meetings
 - Share obscene images or yell obscenities
 - Send racist or misogynistic chats to members
 - Share files containing viruses
- Organizers are forced to shut down the meeting

8

How Zoombombers Gain Access

- Meeting IDs posted on public sites
- Hackers have apps to gather Meeting IDs
- Share Meeting IDs on websites
- Students can invite friends into class meetings

9

Zoom Meeting Security

Two Aspects:

- Blocking Bad Attendees
- Controlling Good Attendees

10

Blocking Bad Attendees

- Avoid public notices
- Safeguard meeting IDs and passwords
- Use the Waiting Room feature
- Lock the Meeting
- If available, require registration

11

Registration

- Requires Pro Account
- Automatic Approval or Manual Approval
- Can pick which questions to ask

The screenshot shows the 'Registration' settings window in Zoom. It has three tabs: 'Registration', 'Questions', and 'Custom Questions'. Under the 'Registration' tab, there is a section titled 'Add Registration Fields' with the instruction 'First Name, Last Name and Email Address required.' Below this, there are three rows of settings for 'Field', 'Address', and 'City'. Each row has a checkbox on the left and a 'Required' checkbox on the right.

Field	Required
<input type="checkbox"/> Field	<input type="checkbox"/> Required
<input type="checkbox"/> Address	<input type="checkbox"/>
<input type="checkbox"/> City	<input type="checkbox"/>

12

Registration

- Requires Pro
- Automatic Ap
- Can pick whic

Field	Required
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

13

Controlling Attendees

- Limit Video Sharing
- Limit Chatting
- Limit File Sharing
- Remove Attendees
- Consider doing a Webinar

14

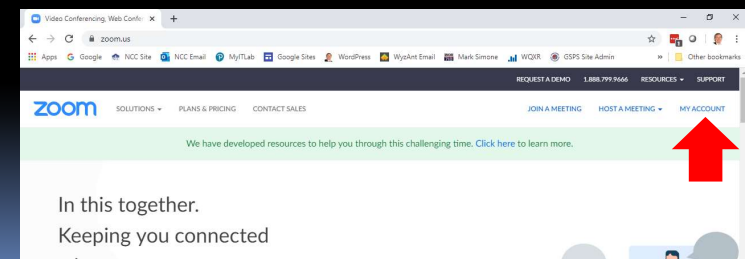
3 Ways to Change Settings

- The Zoom Web Portal
- The Zoom Desktop Client
- In-Meeting Toolbar

15

The Zoom Web Portal

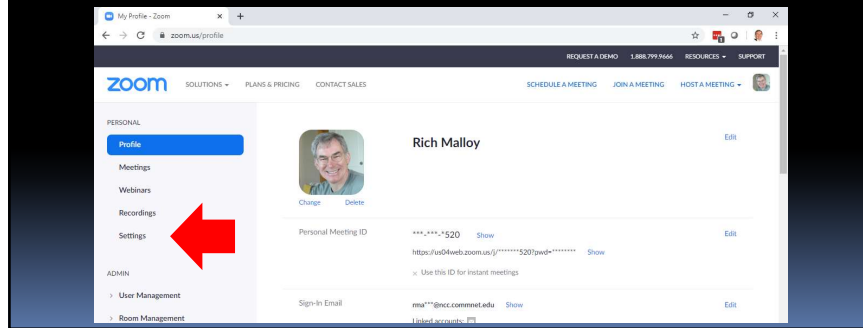
1. Go to: zoom.us
2. Log in
3. Click: My Account



16

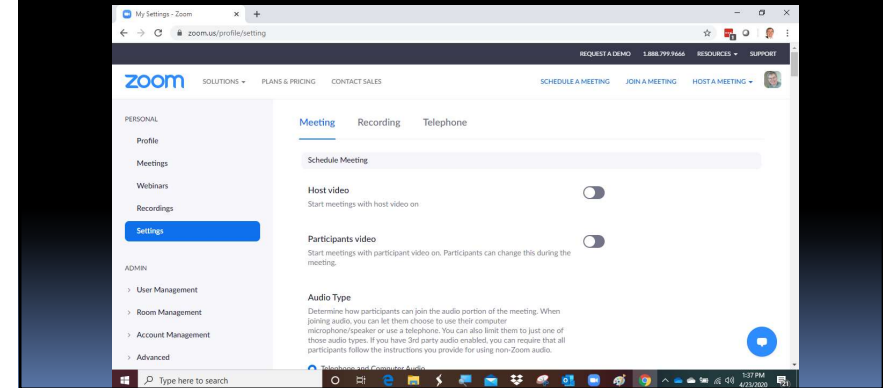
The Zoom Web Portal

- Click: Settings



17

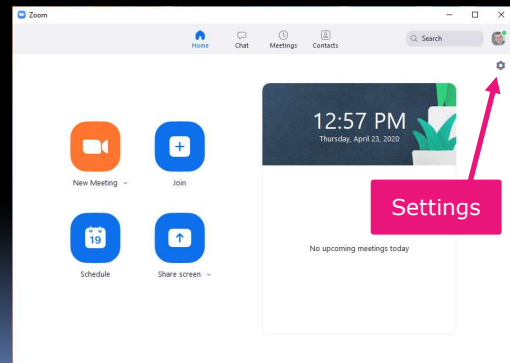
Web Portal Settings



18

The Desktop Client

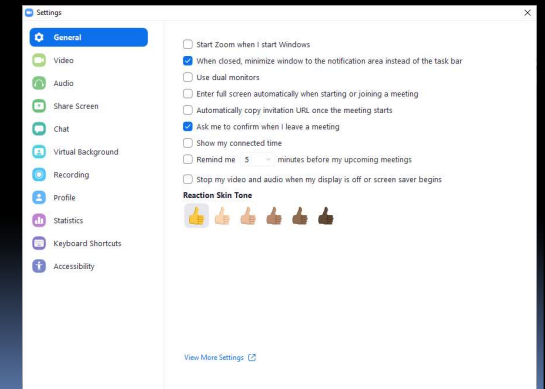
- Search for: zoom
- Run the app
- Press the gear button for Settings



19

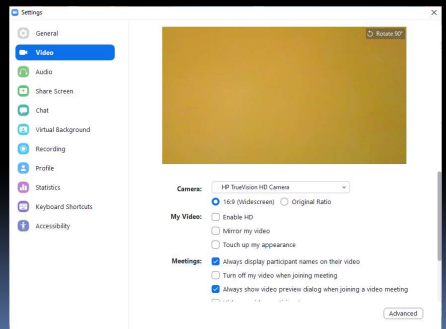
Desktop Client Settings

The General tab

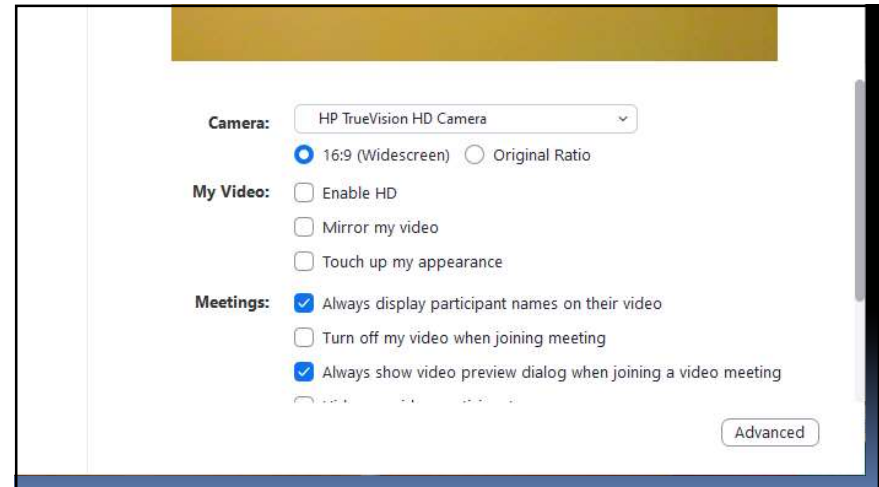


20

Video Settings

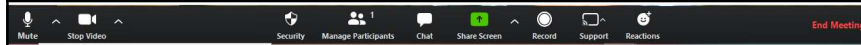


21



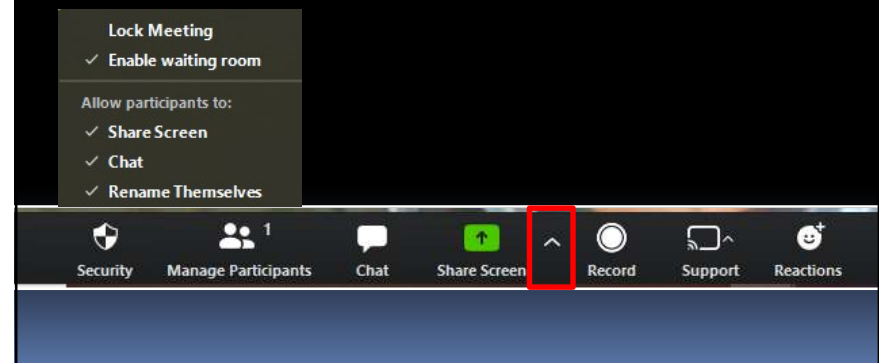
22

In-Meeting Toolbar



23

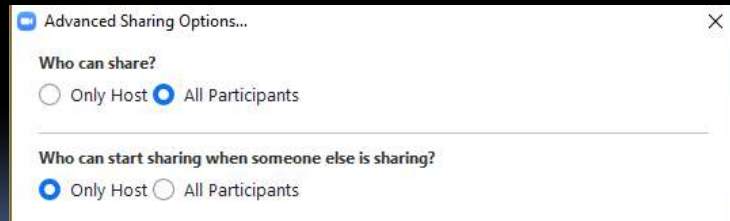
In-Meeting Toolbar



24

Advanced Security Options

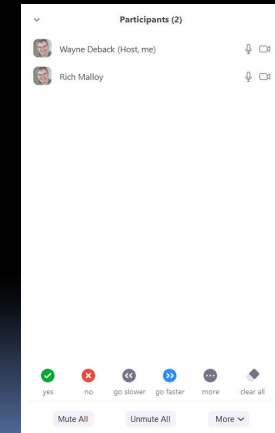
- Be sure to allow Only Host



25

Participants View

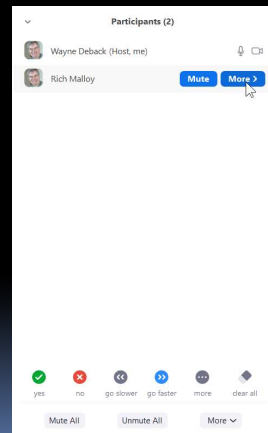
- Note the Mute All button



26

Mute One Participant

- Press the More button for other options

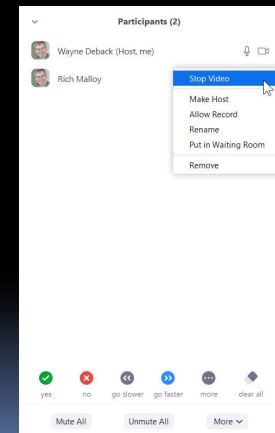


27

Controlling a Participant

Options:

- Put in Waiting Room
- Remove

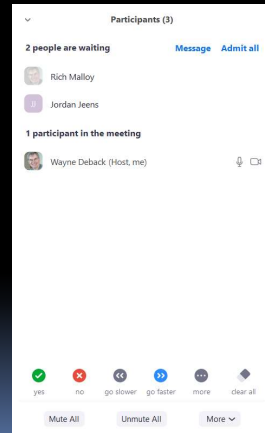


28

Someone's Waiting

Waiting Room Choices:

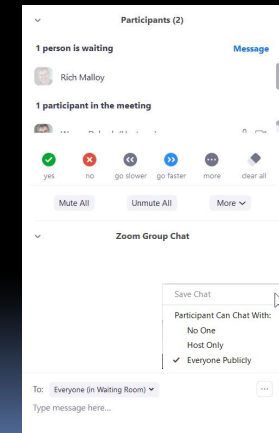
- Admit
- Message (Chat)
- Remove



29

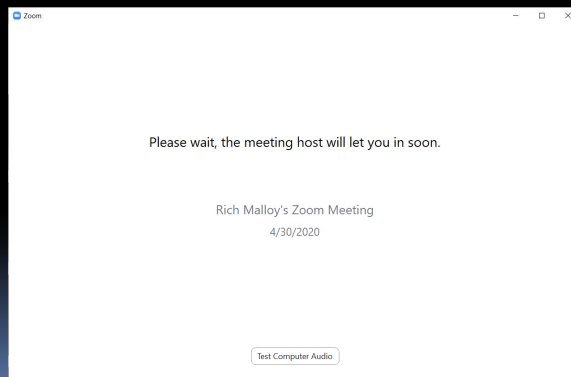
Chatting with the Waiting Room

- Must chat with everyone
- Cannot privately chat



30

Inside the Waiting Room



31

Webinars

- Virtual lecture hall
- Good for large audiences
- Extra cost: \$40/month for Pro accounts

32

Webinar Controls

- Attendees are usually muted
- Only hosts and panelists can share screens
- Chat is available
- Attendees can raise hands

33

LIGHTING



34

Lighting Tips

- Zoom works best with plenty of light
- Natural lighting is best, if available



35

Indoor Lights

- LED bulbs work well
 - Daylight or 5000K are best
 - Soft Daylight or 3000K may be too "warm"
- Use a lampshade if possible



36

Lighting Placement

- Place lights to avoid shadows
- Avoid overhead lights
- Avoid lights behind you
- Best: Lamp behind camera



37

An Example of Good Lighting



38

The Light Source



39

Camera Placement

- Raise the laptop camera to eye height
- Look at the camera, not the screen



40

Lighting References

YouTube Videos:

- [How To Look Good on Video Calls for Zoom FaceTime Skype](#)
- [Top 10 Tips & Tricks For A Zoom Meeting | Lighting | Set Up | Makeup & More! | MsGoldgirl](#)

Blogs:

- [How to look your best on a video call](#)

41

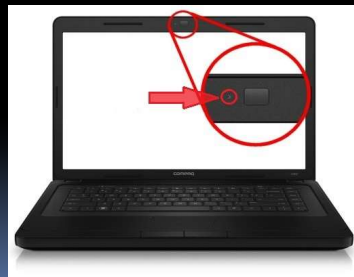
SOUND



42

Laptop Microphones

- Pinhole at top of display
- Not very good quality
- Picks up room noise, echo



43

Smartphone Earbuds

- Small microphone
- But close to your mouth
- Pretty good quality



44

Lapel Microphones

- Tiny microphones attached to clothing
- Better quality than laptop microphones



PoP voice
Professional Lavalier
Lapel Microphone,
~\$17 on Amazon

45

USB Microphones

- Connect to USB connector
- Good quality, but volume may be low



Samson Meteor Mic, ~\$69



Audio-Technica AT2005USB, ~\$69

46



BACKGROUNDS

ToC

47

Background Tips

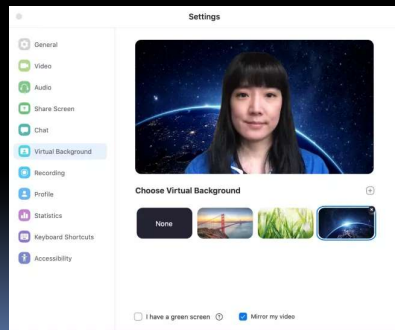
- Be aware of your background
- Keep it as simple as possible
- Close any doors

~~CLUTTER~~

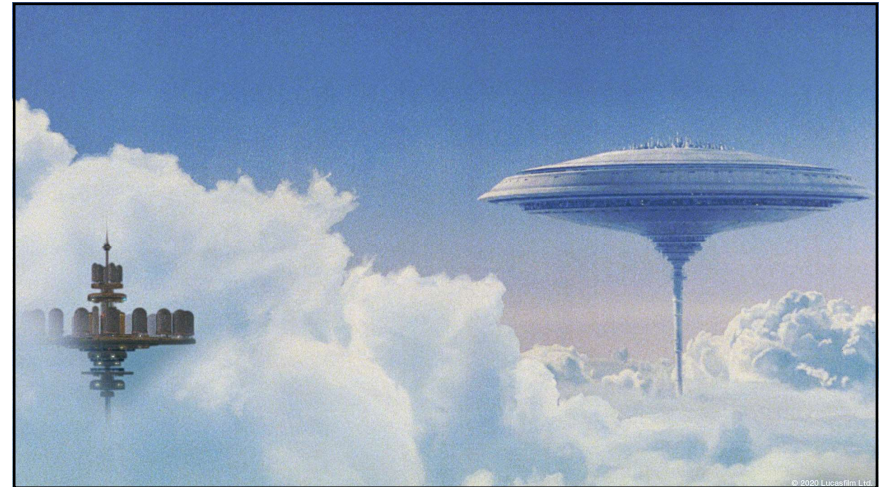
48

Virtual Backgrounds

- Several possibilities
- In the desktop app, click Settings (gear icon)
- Many other choices
 - <https://www.tomsguide.com/news/best-free-zoom-backgrounds>



49



50



51



52

Green Screens

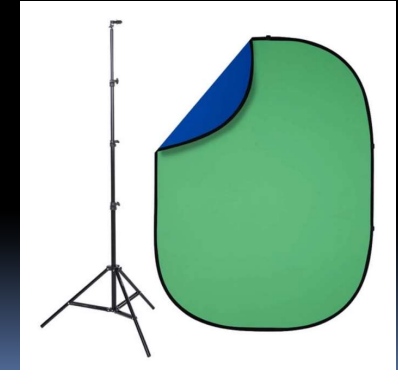
- For the best virtual backgrounds
- Expensive



53

Popup Green Screens

- Foldable
- 6 by 4.5 feet
- \$60



54



MOBILE DEVICES

ToC

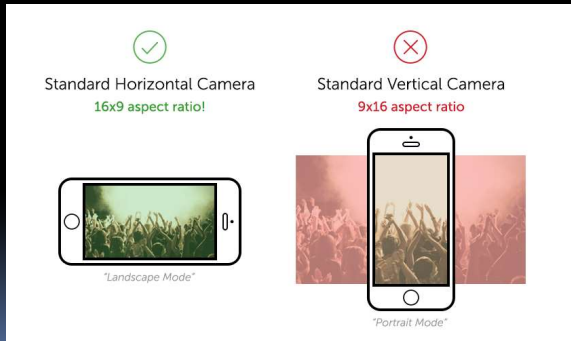
55

Zoom on Mobile Devices

- Apps for iPhone, iPad, and Android
- Limited functionality
- Steadiness problem

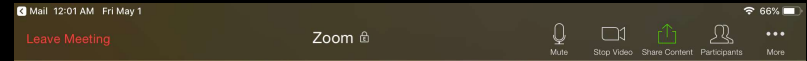
56

Hold the Phone — Correctly



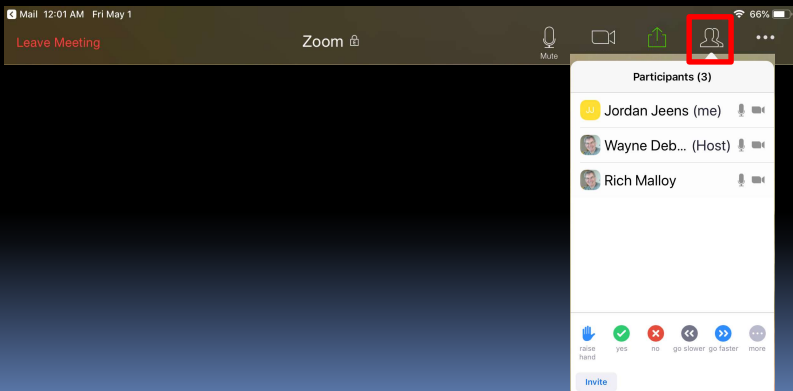
57

iPad Controls



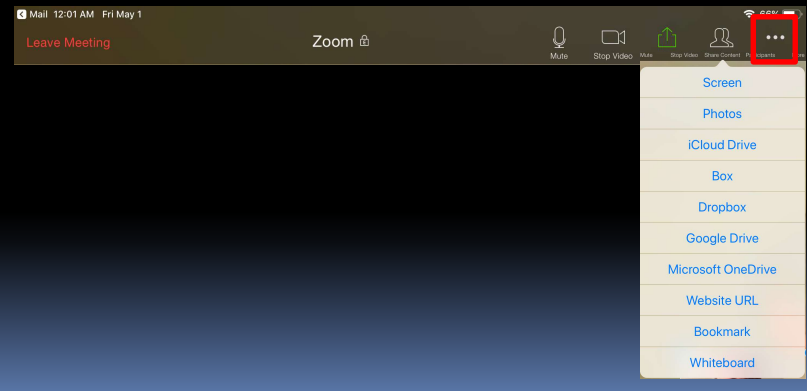
58

iPad Controls



59

iPad Controls



60

Cellphone Tripods

- UBeesize Tripod S
 - ~\$20 on Amazon



61

BEST PRACTICES


[ToC](#)

62

Best Practices

- Getting Ready
- Getting Started
- Interact
- Viewing Tips
- Keyboard Shortcuts
- Best Screen Sharing Settings

63

Getting Ready

- Rehearse a day or so before the event
- Involve all presenters
- Check all connections
- Rehearse by yourself:
 - Set up second account
 - On tablet, phone, or second computer

64

Getting Started

- Start early
- Housekeeping
 - Show attendees can interact
- Start interacting quickly
 - Will help dissuade latecomers

65

Interactions

- Polls
- Chats
- Raise hands
 - Real or simulated
- Interactive annotations

66

Best Viewing Options

- Use Gallery view
- Avoid HD video for yourself

67

Gallery View



68

Gallery View vs. Speaker View

- Click button in upper right corner of screen
- As a host, Gallery View shows all participants
- As an attendee, Speaker View might be best

69

Valuable Shortcut Keys

- Mute All: Alt M
- Share/Unshare: Alt S
- Raise/Lower Hand: Alt Y

70

Best Screen Sharing Options

- Magnify text on your computer screen
 - Windows: Rt-click Desktop > Screen Options
- Magnify the mouse pointer
 - Windows: Control Panel > Mouse > Magnified
- Optimize for System Audio and Videos
- Annotations

71

Sharing Options

- Check both if you are sharing a video

Share computer sound Optimize Screen Sharing for Video Clip

72

Sharing Controls



73

Annotation Tools



74

References

- Guidelines for Configuring Zoom at Your Nonprofit
 - <https://blog.techsoup.org/posts/guidelines-for-configuring-zoom-at-your-nonprofit>
- [Zoom Online Event Best Practices \(pdf\)](#)
- [Zoom Meetings Training Reference Guide \(pdf\)](#)

75

Website Shortcut

bit.ly/zoombomber

76



77



78



79