System Requirements for Attendees

Desktop:

- **Desktop or laptop computer** (note: most computers purchased within the past few years will exceed the minimum requirements stated below.)
- **Operating System:**
    1. Mac: Mac OSX 10.7 or later
    2. Windows: Windows 10, 8, 8.1, 7, Vista (SP1 or later), XP (SP3 or later)
    3. Ubuntu: 12.04 or later
    4. Linux: Red Hat Enterprise Linux 6.4 or higher

- **Processor / RAM:**
    1. Single Core 1Ghz or higher (Dual core 2Ghz or higher, 4G RAM recommended)

- Web Browser:
    1. Windows: Chrome 72+, Edge 84+, Firefox 27+, or IE 11+
    2. Mac: Chrome 30+, Safari 7+Edge 84+, or Firefox 27+
    3. Linux: Chrome 30+, Firefox 27+

- **Internet Connection:**
    1. 1.5 Mbps "up" minimum (3+ Mbps "up" recommended). Note: wireless speeds are lower than your ISP's advertised speeds. You can use speedtest.net to test your speeds on your computer.
- **Hardware (recommended but not required)**
    1. Webcam
    2. The microphone and speakers that comes built-in to most computers is adequate, but a headset with a mic or a stand-alone microphone will create a richer, cleaner sound.

Mobile Web:

- Smartphone with web browser (Chrome, Edge, Firefox, or Safari recommended)

Native App:

- Apple or Android smartphone
- iOS version 11.0 or higher
- Android version 5.1 (Lollipop) or higher

System Requirements for Speakers

- Desktop or laptop computer with at least:
    1. Mac: Mac OSX 10.7 or later
    2. Windows: Windows 10, 8, 8.1, 7, Vista (SP1 or later), XP (SP3 or later)
    3. Ubuntu: 12.04 or later
    4. Linux: Red Hat Enterprise Linux 6.4 or higher

While it is possible to present from a tablet or mobile phone, it is not recommended.

- Processor / RAM
    1. Single Core 1Ghz or higher (Dual core 2Ghz or higher, 4G RAM recommended)
- Browser
    1. Windows: Chrome 72+, Edge 84+, Firefox 27+, or IE 11+
    2. Mac: Chrome 30+, Safari 7+Edge 84+, or Firefox 27+
    3. Linux: Chrome 30+, Firefox 27+
- Bandwidth
    1. 1.5 Mbps "up" minimum (3+ Mbps "up" recommended)
    2. Hint: Use speedtest.net to test
- Hardware
    1. Webcam
    2. The microphone and speakers that comes built-in to most computers is adequate, but a headset with a boom mic or a stand-alone microphone will create a richer, cleaner sound. There are dozens of models, wired and wireless, available on Amazon for less than $100 with 4-star or better ratings.
    3. A second monitor is recommended, but not required.