**Launch Server部署服务器（双击runserver.bat）**

1. On the center computer

在中间的电脑上

* 1. press windows key

按下windows键

* 1. Type “git bash” + enter

输入git bash +回车

* 1. Type “cd ~/desk” + tab + “/web” tab (it should fill in ~/desktop/webcam-recorder” automatically using tabs.

输入”cd ~/desk”后按tab键，会自动补全为~/desktop/webcam-recorder

* 1. Type “npm run server”

输入“npm run server”

* 1. Note: Press ctrl+c to kill the server if necessary.

注：必要情况下可以通过按ctrl+c来停止服务器

* 1. Note: If there is error, may need to go to task manager and manually END TASK of Node.js process.

注：如果出现错误，可能需要通过打开任务管理器，来手动结束Node.js进程

**Load Browsers（设置浏览器）**

1. On each computer

在每一台电脑上

* 1. Press windows key

按下windows键

* 1. Type “brave” + enter (opens up Brave browser)

输入brave+回车（打开Brave浏览器）

* 1. Type in “s3and0s.github.io/webcam-recorder”

在地址栏输入“s3and0s.github.io/webcam-recorder”

* 1. Load unsafe script (shown in image below)

选中Load unsafe script（如图所示）

A picture containing device

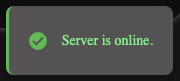
Description automatically generated

A screenshot of a cell phone

Description automatically generated

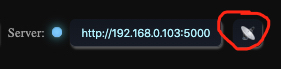
* 1. Server should now say “server is online”.

服务器会显示server is online



* 1. If not online, click this button on the middle computer:

如果没有，点击中间电脑上的这个按钮

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* 1. If the address change, you must update the left and right computer IP address to the same address!

如果地址变了，你必须修改左边和右边电脑上的ip地址为相同的地址

**Pair Cameras**

1. Each camera is labeled according to color.

每个摄像头都按颜色标记了对应的电脑

* 1. Blue: left

蓝色：左边电脑

* 1. Pink: center

粉色：中间电脑

* 1. Orange: right

橙黄色：右边电脑

1. On each machine, load one camera at a time:

在每台电脑上，一次打开一个摄像头

* 1. Turn off all camera except one (LED light is RED when off, no light when idle, and BLUE)

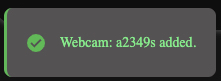
关闭其它所有的摄像头，只留下一个（摄像头上红灯亮表示已经关闭，无灯表示空闲状态，蓝灯亮表示在工作中）

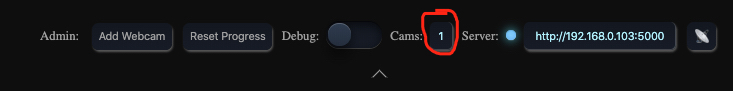
* 1. Press esc on keyboard until one webcam is added. Then turn on another camera, and repeat until all camera added (ONE AT A TIME).

按下对应键盘上的esc键，直到一个摄像头被添加。然后打开另一个摄像头，重复以上过程直到所有的摄像头都已添加完毕（一次只能添加一个）。

* + 1. You can tell all cameras are added in three ways:

有三种方式确认摄像头添加完毕





A close up of a screen

Description automatically generated

* 1. The total camera should be

摄像头的总数应该为

* + 1. Left: 3

左边电脑3个

* + 1. Middle: 2

中间电脑2个

* + 1. Right: 3

右边电脑3个

* 1. Note: The save will NOT work if all camera are not all turned on. The server must be RESTARTED if recording start without all 8 cameras turned on. See step 1.

注：如果摄像头没有都被打开，数据将不会被保存。在这种情况下必须重启服务器。参见第1步。

**Demonstrate to Participant（向被试人员说明）**

1. Assuming all step complete above (server is connected, and 8 cameras loaded):

假设上述所有步骤均已完成（服务器已连接，8个摄像头都被添加完毕）

1. Type in test in the 输入名字 input box and click enter. It will go to testing screen.

在输入名字的输入框里输入用户名，点击enter，页面会跳转到测试页面。

1. Show participant press space to start recording, read sentence, and space again to stop recording. The timer will start when start recording.

告诉被试人员按空格键开始录制，读出屏幕上的句子，再次按空格键停止录制。开始录制之后计时器会开始计时。

A close up of a logo

Description automatically generated

1. It will automatically jump to next sentence when stop recording. If make mistake, press SPACE to stop recording, THEN left arrow key to jump back to the previous sentence.

当用户停止录制时页面会自动跳转到下一句话。如果用户录制时读错了，按空格键停止录制，然后按左箭头←跳转到上一句话重新录制。

1. Participant MUST wait for files to finish saving and see green record button before pressing space to start recording next sentence.

用户必须等待文件完成保存，屏幕上出现下图所示的绿色录制按钮后，才能按空格开始招录制下一句话。

A picture containing object, clock

Description automatically generated

1. User may see the saving status on the page.

用户可以在页面上看到保存状态。



**Run into any issues（如果有任何问题）**

1. Restart the server and just set up the middle computer again (cameras).

重启服务器，并只需要重新添加中间电脑上的摄像头。

1. Test one sentence to see if all 8 camera save. Then press left arrow key to allow participant to continue.

试着录一句话来确定是否所有8个摄像头都可以成功保存数据。然后按下左箭头键来回到上一句话，并让用户继续录制。

**After one day’s recording (一天的录制结束后)**

Transfer the data into hard disk. The directory is from

~/Desktop/webcam-recorder/server/data –> Backup Drive/Lipreadingdata/

把录制的数据移动到硬盘里，目录为从

~/Desktop/webcam-recorder/server/data –> Backup Drive/Lipreadingdata/