**Goal:** Use Raspberry Pi to host and configure an IRC server.

**Steps:**

1. Get Raspberry Pi and microSD card
2. Download Rasbarian OS onto SD card
3. Boot Rasberry Pi into Rasbarian

Run update and upgrade commands

(sudo apt-get update && sudo apt-get upgrade –y)

1. Run install command

(sudo apt-get install gcc libssl-dev –y)

1. Download IRC server called UnrealIRCd and install to /usr/bin
2. Configure the Unreal IRC by navigating to the Unreal folder (cd Unreal 13.2)

then (/Config) command

1. Change support SSL connections to “Yes”
2. Leave all other settings on default
3. Genertate SSL certificate and type (make)
4. CD /usr/bing and run unrealircd.conf
5. Many configurations were made in this file based on online research
6. Start IRC server using (/unreal start) command

**Risks/Challenges:**

1. Getting Rasbarian to boot
2. Finding an easy to configure IRC server that’s compatible with Rasbarian
3. Trial and error with different configuration settings until it worked (configuration is the hardest part)
4. Downloading Rasbarian(long download)
5. UnrealIRCd not issuing SSL certificate after changing configuration setting

**Materials Needed:**

1. Raspberry Pi
2. Internet Connection
3. MicroSD card
4. Sd card reader
5. Computer to download