Ubuntu 20.04 Dual Boot

Initial Hiccup:

The ubuntu version that was already installed with dual boot was 22.04 LTS. This was done during the selection task round. Hence, in order to accomodate ROS software which is suitable only for 20.04, the ubuntu version 22.04 was uninstalled with backup on a 16 GB drive.

Fix and Installation:

The backed up folders were shifted to Windows, and the 16 GB drive was wiped. For the installation of ubuntu 20.04, the partitioned disk was kept unallocated and once again, Rufus was used to install the .iso file into the 16 GB drive.

One issue that was faced was the reinstallation of ubuntu. This was possibly because the grub installer was still left uninstalled. Since, after forcefully removing it, the ubuntu installation was successful.

Resources referred to while installing ubuntu for dual boot:
https://www.xda-developers.com/dual-boot-windows-11-linux/
https://www.youtube.com/watch?v=mXyN1aJYefchttps://itsfoss.com/uninstall-ubuntu-linux-windows-dual-boot/
https://askubuntu.com/questions/429610/uninstall-grub-and-use-windows-bootloader

Some Ubuntu Shortcuts:

- In LibreText: (Shift + F12) to bullet point a statement.
- (Ctrl + Shift + PrtSc) to copy screenshot to clipboard.
- (Shift + PrtSc) to save screenshot as picture.

This answer is for those with UEFI who have deleted the Ubuntu partitions before removing grub

You will be doing this from Windows 10. No bootable media required.

Where `bootrec /fixmbr`, `bootsect /nt60` and the Ubuntu live with the `boot-repair` suggestions have failed, this has worked for me:

(This answer borrowed verbatim from here)

1. Run a `cmd.exe` process with administrator privileges
2. Run `diskpart`
3. Type: `list disk` then `sel disk X` where X is the drive your boot files reside on
4. Type `list vol` to see all partitions (volumes) on the disk (the EFI volume will be formatted in FAT, others will be NTFS)
5. Select the EFI volume by typing: `sel vol Y` where Y is the `SYSTEM` volume (this is almost always the EFI partition)
6. For convenience, assign a drive letter by typing: `assign letter=Z:` where Z is a free (unused) drive letter
7. Type `exit` to leave disk part
8. While still in the `cmd` prompt, type: `Z:` and hit enter, where Z was the drive letter you just created.
9. Type `dir` to list directories on this mounted EFI partition
10. If you are in the right place, you should see a directory called `EFI`
11. Type `cd EFI` and then `dir` to list the child directories inside `EFI`
12. Type `rmdir /S ubuntu` to delete the ubuntu boot directory

Assuming you only ever had two operating systems (Win 10 & Ubuntu) you should now be able to boot directly to Windows without hitting the black grub screen.