**Hardware requirements for processing AR and VR contents (recommended)**

1. Operating System: Microsoft Windows 10 on a 64-bit system
2. CPU: Intel Core i7 processor
3. Memory: 8 GB (minimum) and 16 GB (recommended)
4. Graphics Card: nVidia GeForce RTX 2080 Ti PCI-Express 3.0 with minimum 11 GB emmory
5. Network Card: 10 Gigabit Fast Ethernet
6. Graphics Software: Microsoft DirectX 11 or above
7. Storage: SSD PCIe NVMe (recommended)

**PC Build:**

The computers built for running VR applications should be flexible, it means that these PCs should have high processing power with a scope of upgradation in the future. And at the same time these PCs should have the power to meet the Oculus and HTC recommended specifications. (Minimum and in-budget)

1. Processor: Intel i5 6th generation or newer.
2. Motherboard: MSI intel Skylake B150 LGA 1151
3. Graphics card: nVidia GeForce GTX 1070
4. Memory: 8 GB
5. Storage: SSD PCIe NVMe (Samsung 850 EVO – 250 GB)
6. CPU Cooler: Cooler Master Hyper 212 EVO
7. Operating System: Windows 10 Pro
8. VR System: Oculus Rift, HTC Vice

**What about CPUs and GPUs?**

VR, AR systems requires more powerful GPUs over CPUs and not everyone can have powerful GPUs.

**How 5G and Fibre Optics will impact AR and VR use and development?**

As 5G is the latest and fastest internet connectivity technology. A research shows that 5G will solve the network requirement of AR and VR. This means AR and VR can go mainstream with the use of 5G.

5G solves the high bandwidth requirement demands of AR and VR technology. 5G will make AR and VR technology much faster with faster data flow.

Therefore shifting all the hardware to the cloud will help those who cannot afford high end systems. The users will need to have fast internet connectivity (5G or Fibre Optic), and a PC with basic graphics processing and storage.

The users can access the high end servers and use them for compiling and generating the AR, VR and MR content.

**Pros of using Cloud Servers over building a high end computer at home:**

1. No need for onsite hardware or great capital expenses. Using a cloud server is well suited to small companies and individual users/creators because they may soon outgrow their storage needs and expanding storage on cloud is easy.
2. The cloud solutions are generally on demand so the users only have to pay for what they need.
3. Easy backup and restore facilities and access on multiple devices. Cloud services support automatic backup which can minimize data loss.
4. Automatic software and applications updates/upgrades.
5. Enhanced collaborations, cloud services can be accessed on multiple devices therefore, increasing the development collaborations.

**Why we are planning to provide cloud services to our users?**

The use and need of cloud computing is increasing every day and cloud computing have certain cost and hardware benefits over building an equally powerful machine at client-side. And by our service we want to provide the users with a service which they can afford at minimal price and access over different platforms. The same platform will also provide the users with a marketplace where they can trade their AR/VR/MR content with other organizations and companies.

**How will the user get benefits from using this cloud service?**

1. This will be a cross-platform service, which means it will be OS independent. Therefore the user need not worry about setting up the service for different OSs.
2. Expandable hardware supports. The user can increase or decrease hardware resources as per their need and just pay for what they are using.
3. Automatic software updates and hardware upgrades. The users need not worry about their software and hardware upgrades as it will be automatically done at the server side.
4. The users can collaborate with their teams and other organizations as it is a cross-platform service.
5. The users can easily trade their applications and contents using the marketplace.