

# Metaverse development Assignment#2

Name: Dawood Junaid  
Studying Bs Software Engineering at Sindh  
Madrassa tul Islam University

# Introduction:

In past people interact each other by the means of physical mediums, letters etc. As things grow and digitalize the definition of interaction has been completely change as people interact through media and several other means. But Now everything gonna be change. Now it's time for metaverse that can change the meaning of interaction through virtual world where people avatar can do several and several things that people do in normal real life, like shopping, meetings etc. People can have their own virtual assets like they can buy property and many much more in their virtual digitalized world and many more things.

# **What is metaverse?**

**Basically metaverse is a whole combination of different elements like technology including block chains, augmented reality, virtual reality, web 3.0, and artificial intelligence where user can have their avatars (virtual bodies) envision its user working playing and staying connected with friends from concerts and conferences to virtual trips in any of the corner of the world.**

# Example of metaverse:

Here are some example of metaverse that helps in understanding the future ahead.

## **Meta:**

Meta envision a digital world where digital avatars will be connected through work, travel, entertainment using just a simple VR set.

Zuckerberg the CEO of Metaverse stated that:

**“ The next platform and the medium will be even more immersive and embodied internet where you are in the experience not just looking and writing down at it and we call this the metaverse.”**

# **Example of metaverse:**

## **Microsoft**

**Microsoft uses holograms and is developing mixed and extended reality applications with his mesh platform which combine the real world with augmented reality and virtual reality. Microsoft takes a glimpse on their plans for bringing mixed reality including holograms and virtual avatars to Microsoft terms in 2022.**

# Tools for developers

## Microsoft metaverse stack:

As usual Microsoft covers pretty much everything you can imagine and apply complex machine learning technology to digital twins or using Microsoft power platform ( its low code tool set ).

## Omniverse:

Omniverse allows engineers to collaborate on building a physical product by working together on digital representation of that product. Omniverse is based on open source technology developed by pixar called Universal Scene description (USD). USD is described as the “HTML of 3D”.

## **Web 3.0 and Metaverse:**

**People are now interacting with two dimensional applications on mobile phones or browsing through pages or tabs, these websites are transformed into 3-dimensional objects. So instead of browsing shopping websites, the website is transformed into e-dimensional building or mall, where user interact with it as avatars. User will be able to feel and interact with objects and users virtually. Web 3.0 is a decentralized system powered by artificial intelligence, machine learning technology and Blockchain.**

# **NFTs:**

**With NFTs user can use NFT avatar which serve as an extension of our real life identities. People can buy virtual lands and spaces in metaverse. The underlying blockchain enable users to prove ownership of the digital assets. NFTs boom the experience of metaverse.**



## **DeFi:**

Through DeFi networks you can easily buy or sell your metaverse tokens using smart contracts, P2P transactions, and more.

## **MetaFi:**

MetaFi, or Metaverse Finance, is an all-encompassing term for protocols, products and/or services enabling the complex financial interplay between non-fungible and fungible tokens. It comprises fundamental building blocks of the blockchain space. Adoption of MetaFi will be driven by four key trends: improvement of the DAO services stack, mutualisation of risk, development of financial tooling, and gamification of finance and the financialization of everything. These trends will be most visible in the main clusters of activity of MetaFi, like virtual worlds, games, avatars, wearables, marketplaces, yield-bearing NFTs, and access tokens.