Metaverse Odyssey (SDG)

About Project:
The **Woxsen Metaverse Odyssey** is an immersive, virtual reality-based educational platform designed to provide students, faculty, and visitors with a digital twin of **Woxsen University**. The project recreates the university's campus and academic environment in the metaverse, allowing users to explore, interact, and participate in real-time virtual events, lectures, and social activities. The platform fosters a sense of community while transcending physical limitations, making Woxsen University accessible to a global audience.

The **Woxsen Metaverse Odyssey** also serves as a space for collaborative learning, hosting international guest speakers, virtual seminars, and global networking events. It enables users to experience the university in a way that is more dynamic and interactive than traditional virtual tours, offering immersive simulations, VR classrooms, and interactive campus facilities. This project aims to push the boundaries of digital education by merging physical and virtual worlds, creating a seamless, enriched academic experience.

- **Working Procedure**:
    - **User Interaction and Experience**:
      The **Woxsen Metaverse Odyssey** is accessible via desktop or VR headsets, allowing users to interact with the virtual campus using different devices. Here's how the platform operates for users:

        1. **Accessing the Platform**:
           Users can enter the **Woxsen Metaverse Odyssey** through a dedicated university portal. Once registered, they are prompted to create an avatar, which will represent them within the virtual environment. Whether they are students, faculty, or visitors, this avatar serves as their digital presence in the metaverse.

        2. **Campus Exploration**:
           Once inside, users can freely explore a fully rendered, 3D model of Woxsen University's campus. Key buildings, lecture halls, libraries, sports facilities, and social spaces are all available for exploration. Users can navigate the campus through their avatars, moving between buildings, attending live or pre-recorded classes, and visiting different faculty departments. Interactive markers are placed at various locations to provide detailed information about the facilities, programs, or events happening in real-time.

3. **Virtual Classrooms and Lectures**:
   One of the primary features of the **Woxsen Metaverse Odyssey** is its VR-enabled classrooms. Students can join virtual classrooms from their desktops or VR devices, where they attend lectures in real-time. These lectures are conducted by faculty members, who also have their avatars within the metaverse, allowing them to interact directly with students, answer questions, and facilitate discussions. The virtual environment supports multimedia presentations, including slides, videos, and 3D models, which students can interact with during the class.

4. **Collaborative Learning Spaces**:
   The metaverse platform offers dedicated spaces for group projects and collaborative learning. Students can meet in virtual study rooms, where they can work together on assignments, share screens, and collaborate using virtual tools like whiteboards and presentations. These collaborative spaces are designed to replicate physical group discussions and teamwork, fostering engagement and social learning in a digital environment.

5. **Interactive Simulations**:
   As part of the academic curriculum, **Woxsen Metaverse Odyssey** offers immersive simulations where students can participate in hands-on learning activities. For instance, students in business or management programs can engage in **entrepreneurial simulations** where they practice running virtual businesses. These simulations are designed to mimic real-world scenarios, giving students practical experience in a risk-free environment.

6. **Events and Networking**:
   The metaverse serves as a hub for international networking events, seminars, and guest lectures. Woxsen University regularly hosts virtual conferences, where students can attend keynote presentations by industry leaders and subject-matter experts. These events allow students to network with professionals and peers from around the world, expanding their global reach and academic influence.

7. **Customization and Personalization**:
   The **Woxsen Metaverse Odyssey** allows users to customize their avatars, personalizing their digital identity within the metaverse. Additionally, students can personalize their virtual dorms and common areas, making the experience more engaging and representative of the Woxsen student community. Faculty members

can also customize their virtual classrooms with course-specific content, interactive features, and materials to create a tailored learning environment.

8. **VR/AR Integration**:
   The platform supports both **VR** and **AR** technologies, making it a versatile tool for various applications. Users with VR headsets can fully immerse themselves in the experience, walking through the campus and engaging with the environment as though they were physically present. Meanwhile, **AR** functionalities allow users to access augmented information about the university's facilities, such as historical facts or program details, as they explore the virtual world.