

Event Report

- 1. Name of Event:** Workshop on Augmented Reality (AR) and Virtual Reality (VR)
- 2. Nature of the Event:** Workshop
- 3. Date:** 14th, 15th, and 16th March, 2022
- 4. Time:** 09:00 A.M. to 05:00 P.M.
- 5. Venue:** 2nd Floor, Programming Lab, Anviksha, GSFC University
- 6. Organized by:** GSFC University, GUITAR Council, SSIP, Startup Gujarat and IIC (MoE GoI)
- 7. Number of Participants:** 15, Annexure – 1
- 8. Speakers:** Mr Raj Gohil, Trainer, and Mr. Roshan Rawal, Founder, ExpositARVR
- 9. Key Learning:**

Day 1: 14/03/2022

- An introductory session on AR and VR Technology
- Explained Unity Engine software and its usage
- The session was divided into two parts:
 - Unity Engine Introduction
 - Introduction to C# and OOP concepts
- Unity Engine Introduction contained topics like navigation port, hierarchy, assets, prefabs, materials
- Explored Programming basics and OOP concepts of what classes, methods and properties. Introduction to functions and what arguments are. Basics of Conditional statement and loops.
- Session on real game and build a roll-a-ball game with help of unity physics and scripting
- Explained developers mode function for oculus and build an example scenes
- Instructed to Tej team to explore the XR Interaction Demo Scene
- Guided UI system to Anjali's team for AR

Day 2: 15/03/2022

- Started Introduction to Augmented Reality and Virtual Reality
- Explained the terms and difference between Augmented Reality/Virtual Reality and Mixed Reality
- Discussion on how Unity works with AR foundation and other SDKs to augment Virtual objects and scenes
- Hands on session with Vuforia SDK
- Students build Vuforia Image Target Demo on their computers
- Understand Vuforia Developers portal and different type of image target

AR Team (Anjali's Team)

- Solving Android Build Problem

VR Team (Tej's Team)

- Build Demo Project with XR Interactables and office scene
- Making fire and smoke VFX using Unity's Particle effects
- Making custom 3d objects for scene

Day 3: 16/03/2022

- Deploying Vuforia Image Target on Android Phone
- Introduction to Unity UI Elements
- Making a slider app to change color of material of projected object
- Basic animation for Spawned Object

Completing Markerless AR spawning VR Fire Safety Team:

- Adding sounds and finishing touches
- Deploying final build in oculus

Photos:





Annexure -1

| Sr. No. | Name of Project | Sector | Full Name | Division | Mobile No. | Email Id | Gender |
|---------|---|--------------------|--------------------|---------------|---------------------------------|--------------------------------|--------|
| 1 | Creating Training & Laboratory | VR Technology | Tej Dhruve | F&EHS | 9408733653 | 19bt05006@gsfcuniversity.ac.in | Male |
| 2 | Module through Virtual Reality Platform | | Dhruv V. Desai | F&EHS | 6352544283 | 19BT05005@gsfcuniversity.ac.in | Male |
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| 6 | Creating Interactive Education | AR Technology | Anjali Nair | B.Sc. Biotech | 8487909907 | 19sc02001@gsfcuniversity.ac.in | Female |
| 7 | Material Using Augmented Reality | | Bhagyashree Babu | B.Sc. Biotech | 7226091112 | 19sc02004@gsfcuniversity.ac.in | Female |
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