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Module Title	Futuristic Gaming - Building AR and VR Games with Unity		
Target Audience		TOC Creator/SME	Learning Curve Technologies
		MCO Creator	
Module Goal	This module gives a brief knowledge of Gaming in AR and VR platforms using Unity.		
Content Type	Theory and Lab		

1	*Introduction and Setting Up of VR Packages*	Theory: 1 Hour + Lab: 1 Hours
2	*Setting Up a Simple VR Scene*	Theory: 1 Hour + Lab: 1 Hours
3	*Creating User Interface in VR*	Theory: 1 Hour + Lab: 1 Hours
4	*Working with OVRPlayerController*	Theory: 1 Hour + Lab: 1 Hours
5	*Input and Hand Controllers*	Theory: 1 Hour + Lab: 1 Hour
6	*Grabbing Objects using Controllers*	Theory: 1 Hour + Lab: 1 Hour
7	*Making an Object Distance Grabbable*	Theory: 1 Hour + Lab: 1 Hour
8	*Creating an Intro Scene in VR*	Theory: 1 Hour + Lab: 1 Hour
9	*Introduction to Augmented Reality and Vuforia*	Theory: 1 Hour
10	*Setting Up Vuforia packages for Unity*	Theory: 1 Hour + Lab: 1 Hour
11	*Setting Up Augmented Reality and Vuforia Package for iOS*	Theory: 1 Hour + Lab: 1 Hour
12	*Creating Image Target for AR*	Theory: 1 Hour + Lab: 1 Hour
13	**Adding Image Target for AR**	Theory: 1 Hour + Lab: 1 Hour

14	*Rotating and Scaling an object in Augmented Reality*	Theory: 1 Hour + Lab: 1 Hour
15	*Creating Multi Target in Vuforia*	Theory: 1 Hour + Lab: 1 Hour
16	*Creating Virtual Buttons in Vuforia*	Theory: 1 Hour + Lab: 1 Hour
17	*Introduction to AR foundation*	Theory: 1 Hour + Lab: 1 Hour
18	*Setting Up AR foundation With Vuforia*	Theory: 1 Hour + Lab: 1 Hour
19	*Plane Tracking of Horizontal and Vertical Objects*	Theory: 1 Hour + Lab: 2 Hour
20	*Anchor Points and Environmental Probes*	Theory: 1 Hour + Lab: 1 Hour

Topic Title	Sub-Topic Title	Time
Session 1: Introduction and Setting Up of VR Packages		
	1.1 Introduction to Virtual Reality 1.2 Introduction to Augmented Reality 1.3 How to Develop VR Games and Applications? 1.4 Different Types of VR Headsets and Platforms 1.5 Create a New VR Project with Unity 1.6 Importing the Required Packages for VR Application Creation	**1 HR**
	Lab:	
	1.1 Create a New project Using Unity 1.2 Import VR Packages to the Project	**1 HR**
Session 2: Setting Up a Simple VR Scene		
	2.1 Setting Up a Simple VR Scene 2.2 OVRPlayerController 2.3 OVRCameraRig and Its Key Features	**1 HR**
	Lab:	
	2.1 Create a Simple VR Scene 2.2 Create a Scene with OVRPlayerController for VR	**1 HR**
Session 3: Creating a User-Interface in VR		
	3.1 User Interface in Virtual Reality 3.2 Working with VR 3.3 Best Practices of UI in VR 3.4 Setting Up UI in VR	**1 HR**
	Lab:	
	3.1 Create Different UI Elements in a Scene	**1 HR**
Session 4: Working with OVRPlayerController		
	4.1 Understanding OVRPlayerController 4.2 Understanding OVRCameraRig 4.3 Left Hand and Right Hand Anchors 4.4 OVR Gaze Pointer	*1 HR*

Topic Title	Sub-Topic Title	Time
	4.5 Oculus Pointer Input Module	
	Lab:	
	4.1 Placing UI Elements inside the Player Controller	**1 HR**
Session 5: Input and Hand Controllers		
	5.1 Introduction to Handheld Controllers 5.2 Using Hands as VR Controllers 5.3 What are Hands Prefab in Oculus Interaction SDK? 5.4 Convert Hands as Controllers 5.5 Hand Tracking Limitations	**1 HR**
	Lab:	
	5.1 Convert Hands as Controllers	**1 HR**
Session 6: Grabbing Objects Using Controllers		
	6.1 What Is Object Grab in VR Scene? 6.2 Why Make an Object Grabbable? 6.3 Benefits of Making VR Hand Interactable in a VR Application 6.4 LocalAvatar Prefab Oculus Interaction SDK 6.5 GrabAvatarLeft and GrabAvatarRight Prefabs 6.6 OVRGrabbable Script 6.7 Steps to Make an Object Grabbable in the VR Scene	**1 HR**
	Lab:	
	6.1 Grabbing and Throwing Objects Using a Controller	**1 HR**
Session 7: Making an Object Distance Grabbable		
	7.1 Importance of Distance Grabbing in VR 7.2 Player in OVRGrabber 7.3 Steps to Make an Object Grabbable from a Distance 7.4 Controlling Input Mapping	**1 HR**
	Lab:	
	7.1 Creating Custom Inputs for Controller Buttons	**1 HR**

Topic Title	Sub-Topic Title	Time
Session 8: Creating an Intro Scene in VR		
	8.1 Introduction to UIHelpers 8.2 Working with UI Elements 8.3 Creating the Final Build in .apk Format 8.5 Transferring .apk File to Oculus Device	**1 HR**
	Lab:	
	8.1 Creating the Final Build in .apk Format	**1 HR**
Session 9: Introduction to Augmented Reality and Vuforia		
	9.1 Introduction to Augmented Reality 9.2 Methods for Creating AR Experiences 9.3 Methods of Creating AR Applications Using Unity	**1 HR**
	Lab:	
	9.1 Setting Up an AR Application Environment Using Unity	**0.5 HR**
Session 10: Setting Up Vuforia Engine for Unity		
	10.1 Login and Register in Vuforia Website 10.2 Getting Development Key 10.3 Using License Key in Unity	**1 HR**
	Lab:	
	10.1 Getting a Vuforia License Key and Using It for Creating an AR Application	**0.5 HR**
Session 11: Setting Up Augmented Reality and Vuforia Package for iOS		
	11.1 Setting Up Augmented Reality in Unity Using iOS 11.2 Downloading XCode and Building AR iOS Application 11.3 Downloading Package from Vuforia Portal for iOS Build	**1 HR**
	Lab:	
	11.2 Downloading Xcode and Building AR iOS Application 11.3 Downloading Package from Vuforia Portal for iOS Build	**1 HR**
Session 12: Creating Image Target for AR		

	12.1 Create an Image Target	**1 HR**
	12.2 Creating an Image for Image Target	
	Lab:	
	12.2 Creating an Image Target	**1 HR**
	12.3 Uploading the Image Target to Vuforia	
Session 13: Adding Image Target for AR		
	13.1 Setting Up the Camera in the Unity Scene	**1 HR**
	13.2 Placing a GameObject on the Image Target	
	Lab:	
	13.1 Placing an Object on the Image Target	**1 HR**
Session 14: *Rotating and Scaling an Object in Augmented Reality*		
	14.1 Understanding Touch Input	**1 HR**
	14.2 Rotating and Scaling the Object Using Touch and Moving the Finger	
	Lab:	
	14.1 Writing a Script for Rotating and Scaling an Object	**1 HR**
Session 15: *Creating Multi Target System in Vuforia*		
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	15.2 Placing the GameObject on the Multi Target	
	Lab:	
	15.1 Setting Up Multi Target to a Scene	*1 HR*
Session 16: Creating Virtual Buttons in *Vuforia*		
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	16.2 Placing the Virtual Button on the Image Target	
	Lab:	
	16.1 Creating a Virtual Button	*1 HR*
Session 17: Introduction to AR Foundation		

	17.1 Preparing and Designing Model Target	**1 HR**	
	17.2 Creating Cylindrical Targets		
	Lab:		
	17.1 Setting Up AR Foundation in Unity	**1 HR**	
Session 18: Setting Up AR Foundation with Vuforia			
	18.1 Setting Up AR Foundation with Vuforia	**1 HR**	
	18.2 Creating Cylindrical Target in Vuforia		
	Lab:		
	18.1 Setting Up AR Foundation	***2 HR***	
	18.2 Creating Cylindrical Targets in Vuforia		
Session 19: *Plane Tracking of Horizontal and Vertical Objects*			
	19.1 Setting Up AR Foundation for Plane Tracking	**1 HR**	
	19.2 Uploading and Managing Model in Horizontal and Vertical Planes		
	Lab:		
	19.1 Managing a Model in Horizontal and Vertical Planes	***2 HR***	
	19.2 Applying Vertical Settings to a Model		
Session 20: *Anchor Points and Environmental Probes*			
	20.1 Environmental Probes with AR Foundation	**1 HR**	
	20.2 Setting Up Anchor Points and Environmental Probes		
	Lab:		
	20. Setting up Anchor Points and Environmental Probes	**1 HR**	