3D ASSETS PRODUCTION

Standard Project & Process Plan

3D Model Design Pipeline/Workflow

- 1 Identify Learning Problems
- 2 Research & Documentation
- 3 3D Model Design
- 4 Texturing
- 5 Lighting

· Lesson Based progress and assessmen

- Animation from theory learning period
- 7 Import/Export

- Identify 100 learning problems through a workshop
- Share the problem statements with model developers
 - Collection of data related to the model
 - · Collaborate with subject experts for model development
 - Lowpoly
 - Highpoly
 - Retopology
 - Unwrapping the 3D Models
 - Baking the Model for Texture
 - Making all Texture Map
 - Light creation as per required in model
 - Setting for all created Lights to change the ambiance
 - Rigging (Creating Bones/ Armature for the Designed Model
 - Attaching Bones to the designed mess
 - Appling physics (IK) to the created bones

Import/Export the model in the required format

Development Lifecycle of Contents Content Sourcing – Doc Documentation 2. Proofreading 1. Content **Documentation** 1. Exporting the 3D Model in .FBX Format Import/ 2. Importing the model with all Texture Map & **Export Animation** 2. Task ontent Development Analyzation Creating the Environment Using 3D Designed Models 2. Animation Creation for the Model in Unity Environment 3. Task Applying all the Components **Assignment** Design (Physics/Animation/Material/Script/Audio Source/Video) 4. Lighting (Lights/ Reflection Probe/ HDRP/ URP) 4. Content Development **UI** Design Canvas 2. Panel Creation Creation **Button Creation Finalization** 5. Review 1. C# Coding for User Interfaces Scripting in 2. C# Coding for gameObjects C# 3. C# Coding for Level Design 6. Beta Test Android (Android/ Tab/ Augmented Reality) Rework Rework 2. iOS (iPhone/iPad/ Augmented Reality) Marking Final 3. Windows (Window/ Virtual Reality) Linux Platform 7. Delivery WebGL Validation and Rework phase 6. Rendered 3D Video

Roles & Responsibilities: Documentation

Junior Domain Expert	Domain Expert Senior Domain Expert (Quality Assurance)	
Doing comprehensive research	 Thoroughly checking a 	Checking the document checked
about a given topic	document prepared by a Junior	by DE
Writing a content flow	Domain Expert or JDE	Adding significant missing things
document about the topic in a	 Adding missing contents in the 	in a document
given template	document	 Approval of the document for
Writing good mix of theory and	 Guiding JDE about the content 	final production
practice contents/concepts of a	workflow before writing	 Approving 3D Models for
topic	 Assessing 3D Models for 	development
 Visualization/Case Study of 	development.	
operational scenario of a given		
topic		

Roles & Responsibilities: Management

Team Lead	Project Manager
 Clearing doubts of a developer Periodical training, awareness to the team members Helping a member if he/she is stuck in process Understanding the domain/topic for quality output Team building activities 	 Creating a project sprint, detailed project plan, discussing and mitigating risk Creating a bridge between the educator+learner with the developer. Understanding critical requirements in a topic Help domain experts on creating a effective document Making all stakeholders aware about the
	developmentMotivating the team, meeting sprint targets

Roles & Responsibilities: Development

3D Artist	Game Developer	Full Stack Developer (MERN)	
Is very good in 3D modeling tools like	 Is proficient with Unity and C# 	• Developing web applications for PASS.	
CATIA, Maya, Blender	 Understands OOP concepts and 	Creating WebXR for AR.	
 Knows animation and rigging and 	design algorithms	 Discussing with the team and other 	
Realistic texturing.	Animation in Unity IDE	stakeholders to design and develop	
Has artistic mentality	Designing UML's	intuitive UI	
Is a team player	Writing clean and reusable C# code	Maintaining documentation, API with	
Self-motivated and eager for learning	 Using design patterns to solve 	WebGL/VR applications.	
Being from Mechanical is a plus.	problems		
	Writing technical documentation for		
	future references		
	 Creating quick prototypes 		
	Knowledge of ARCore, ARKit, Vufoira,		
	ARFoundation		
	Knowledge of WebGL and necessary		
	Cross-Platform understanding		

Asset Quality Assurance

Туре	Maker	Checker	Approver
Documentation	Model Developers	Industry & Subject Experts	SMT
3D Model	Model Developers	Industry & Subject Experts	SMT
Virtual Reality	Model Developers	Industry & Subject Experts	SMT
Augmented Reality	Model Developers	Industry & Subject Experts	SMT