Velammal College of Engineering and Technology, Madurai

Department of Information Technology

Assignment-2

Academic Year	2025-26 (ODD)
Batch	2023-27
Course Code-Title	21PIT15– Concepts of Augmented Reality and Virtual Reality
Year/Semester/Section	III/V/B
Course Component	Professional Elective
Name of the Course Incharge	Mrs. M. Prabha, AP-II
Submission Date	**20.08.2025**
Assignment Type	**Case Study with Realtime example** Individual / Group (2–3 members)

CO1: Explain the basic knowledge of AR and VR.	K2
CO2: Outline the scientific, technical and engineering aspects of AR.	K2
CO3: Outline the scientific, technical and engineering aspects of VR.	K2
CO4: Experiment with technologies related to AR and VR software development.	K3
CO5: Summarize the applications of AR and VR engineering.	K2

Max. Marks: 50

1. Do a Case study by choosing **one** real-world AR or VR implementation and analyze it thoroughly. Examples include: ● Microsoft HoloLens in Industrial Training (thyssenkrupp) ● Walmart's VR-based Employee Training ● IKEA Place – AR for Furniture Visualization ● AccuVein – AR in Healthcare ● Google Expeditions – VR in Education ● Ford's Virtual Prototyping with VR ● AR in Navigation – Google Maps Live View	K3

Submission Requirements:	**1. Case Study Report (Max 10 pages, A4, Times New Roman 12pt, 1.5 spacing):**
	  1. Abstract (150–200 words)
	  2. Introduction to AR/VR
	  3. Case Study Analysis
	  4. Technical and Strategic Evaluation
	  5. Conclusion
	  6. References / Citations (IEEE style)
	2. Presentation:
	● 8–12 slides (Google Slides, PowerPoint, or Canva)
	● Use diagrams, screenshots, or flowcharts to illustrate
	● 8–10 minutes presentation time
	● Each member must present at least one slide

Evaluation Criteria	Marks
Understanding of AR/VR concepts	10

		Depth of Case Study Analysis	10
		Real-World Application Insight	10
		Report Presentation & Format	10
		Oral Presentation & Delivery	10
		Total	**50**

References	1. Microsoft Case Studies (2021). thyssenkrupp Uses Microsoft HoloLens to Transform Field Service Operations. https://customers.microsoft.com/en-us/story/thyssenkrupp-manufacturing-hololens 2. Google for Education (2020). Google Expeditions: Bringing VR and AR to Classrooms. https://edu.google.com/products/vr-ar/expeditions/ 3. IKEA Place App Overview (2018). How IKEA Uses AR to Reinvent Online Furniture Shopping. https://www.ingka.com/news/ikea-place-app-augmented-reality/ 4. AccuVein Inc. (2022). AccuVein: Improving Patient Care with Augmented Reality. https://www.accuvein.com/technology/ 5. Milgram, P., & Kishino, F. (1994). A taxonomy of mixed reality visual displays. IEICE Transactions on Information and Systems, E77-D(12), 1321–1329. https://etclab.mie.utoronto.ca/people/paul_dir/IEICE94/ieice.html