Final Year B. Tech. CSE Augmented Reality and Virtual Reality

Assignment No. 6

# Submitted by:

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**Title:** Develop Augmented Reality Application.

**Aim:** To understand the steps for developing Augmented Reality Application.

**Conclusion:** Thus, we have understood the steps and developed Augmented Reality Application.

# FAQs:

1. **What is Vuforia Engine?**

* Vuforia Engine is an advanced augmented reality (AR) platform that enables developers to create interactive AR experiences.
* It allows apps to recognize, track, and interact with real-world objects, supporting both marker- based and markerless AR.
* It is widely used in mobile applications, industrial solutions, and gaming, offering seamless integration with platforms like Unity, Android and iOS.

# How do we add Assets in Unity?

* + **Image & Object Recognition** – Detects and tracks 2D images, 3D objects and environments.
  + **Model Targets** – Recognizes and tracks objects based on 3D CAD models.
  + **Ground Plane** – Enables AR content placement on flat surfaces without markers.
  + **Cloud Recognition** – Identifies and tracks images from cloud-based databases.
  + **VuMarks** – Custom-designed markers that combine barcodes and images for tracking.
  + **Area Targets** – Maps large physical spaces for immersive AR applications.
  + **Multi-Target Tracking** – Recognizes multiple images or objects simultaneously.
  + **Occlusion Handling** – Enables virtual objects to interact realistically with real-world elements.
  + **Cross-Platform Support** – Compatible with Android, iOS, HoloLens, and Unity.

# What is a package manager in Unity?

* + An Image Target is a predefined 2D image that Vuforia Engine recognizes to trigger AR content.
  + It is commonly used in applications where digital objects, animations or information

overlays appear when the camera detects a specific image.

* + Image Targets support various formats like JPEG and PNG and can be stored locally or in the cloud.
  + This feature is essential for interactive learning, marketing and gaming applications.

