Learning checkpoint - inside-out vs. outside-in tracking

- There are two basic ways to track the position and orientation of a device or user: outside-in tracking and inside-out tracking.
- Outside-in tracking uses external cameras or sensors to detect motion and track positioning. This method offers more precision tracking, but a drawback is the external sensors lower the portability.
- Inside-out tracking uses cameras or sensors located within the device itself to track its position in the real world space. This method requires more hardware in the AR device, but offers more portability.
- On the AR headset side, the Microsoft HoloLens is a device that uses inside-out tracking. On the VR headset side, the HTC Vive is a device that uses outside-in tracking.
- On the AR mobile side, the Google Pixel is a smartphone that uses inside-out tracking for AR.