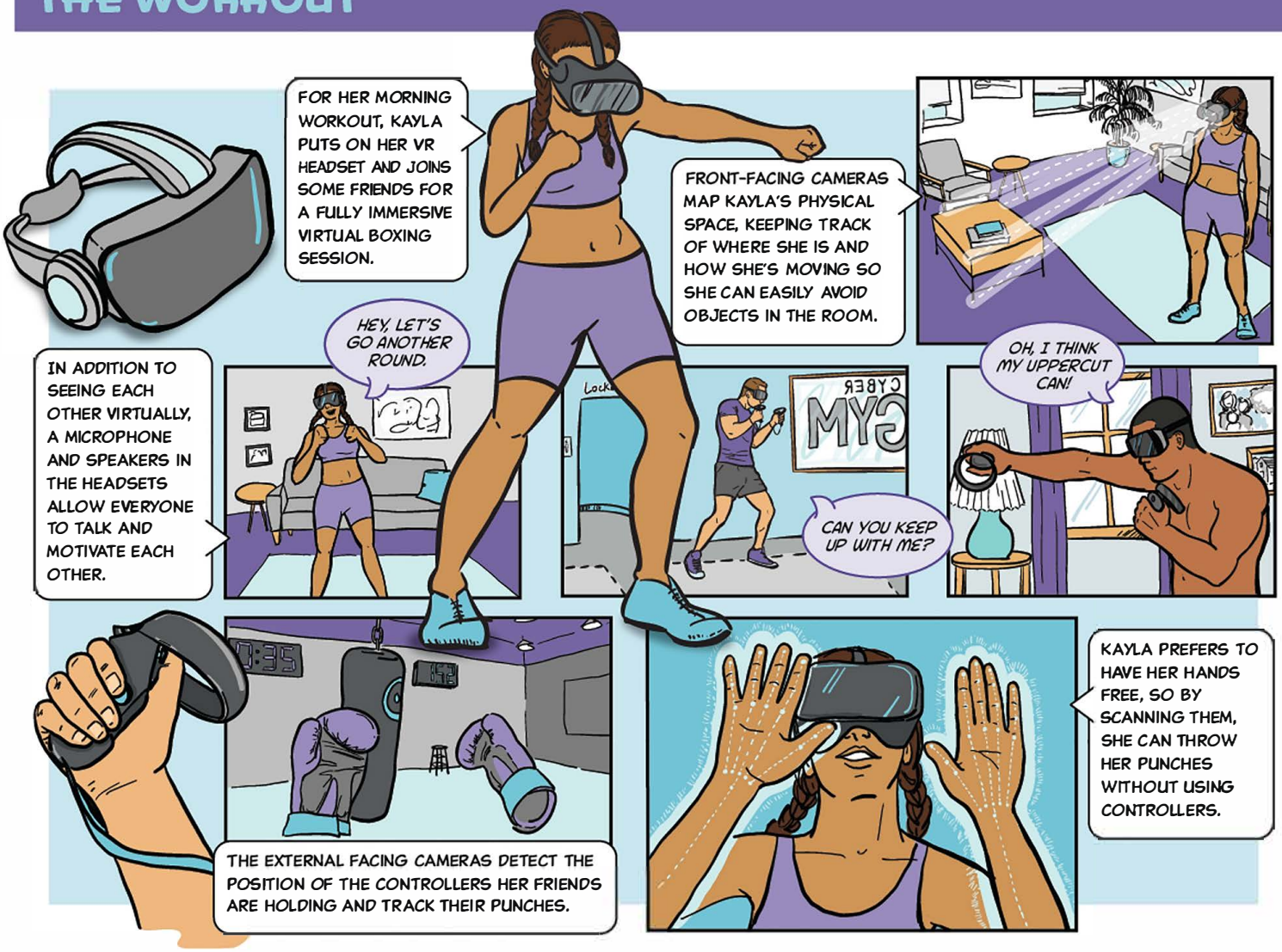
How VR and AR immerse you IN THE DIGITAL WORLD

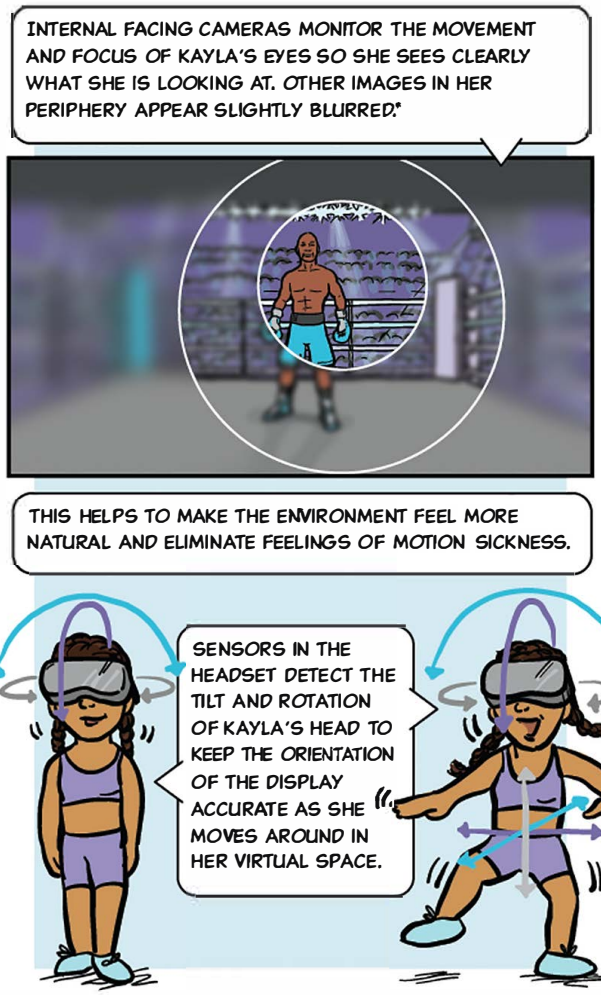
XR ASSOCIATION

Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) devices offer you the chance to engage in a digital world. But how exactly do they do that? Cameras and sensors coordinate to follow your movements, gather data, and translate the information into a realistic digital experience. Here's how the technology works through a day in the life of Kayla.

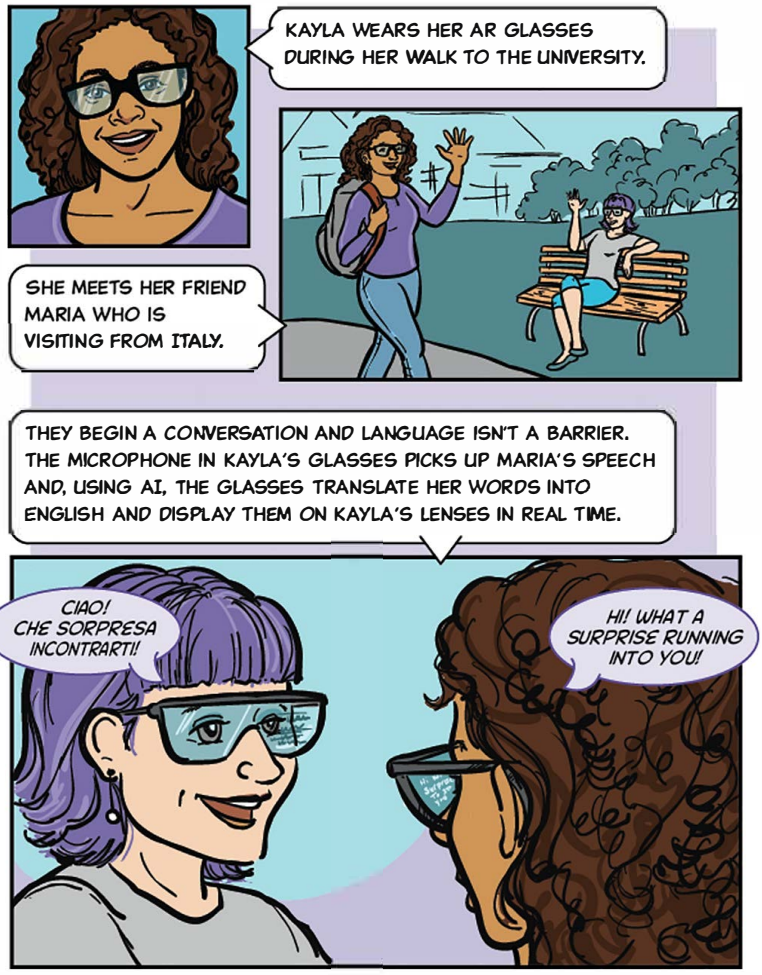
THE WORKOUT



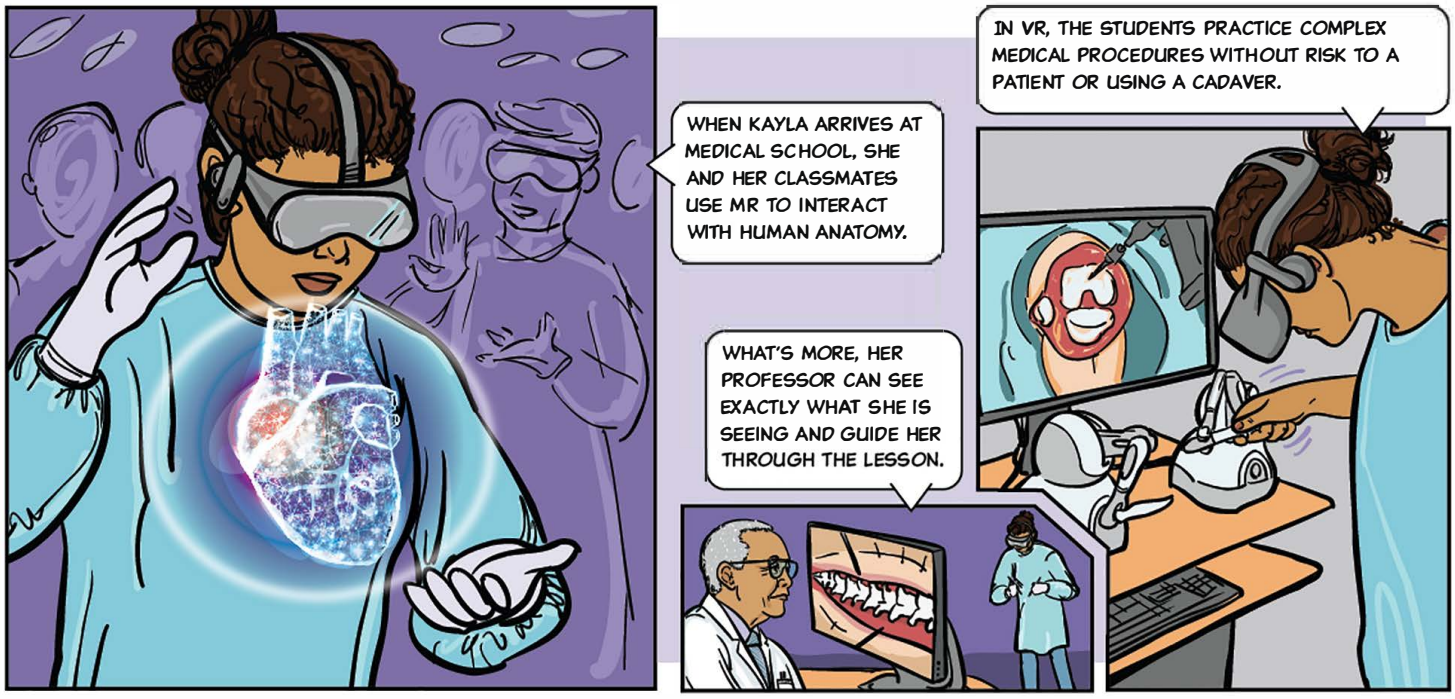
HOW DOES IT KNOW?



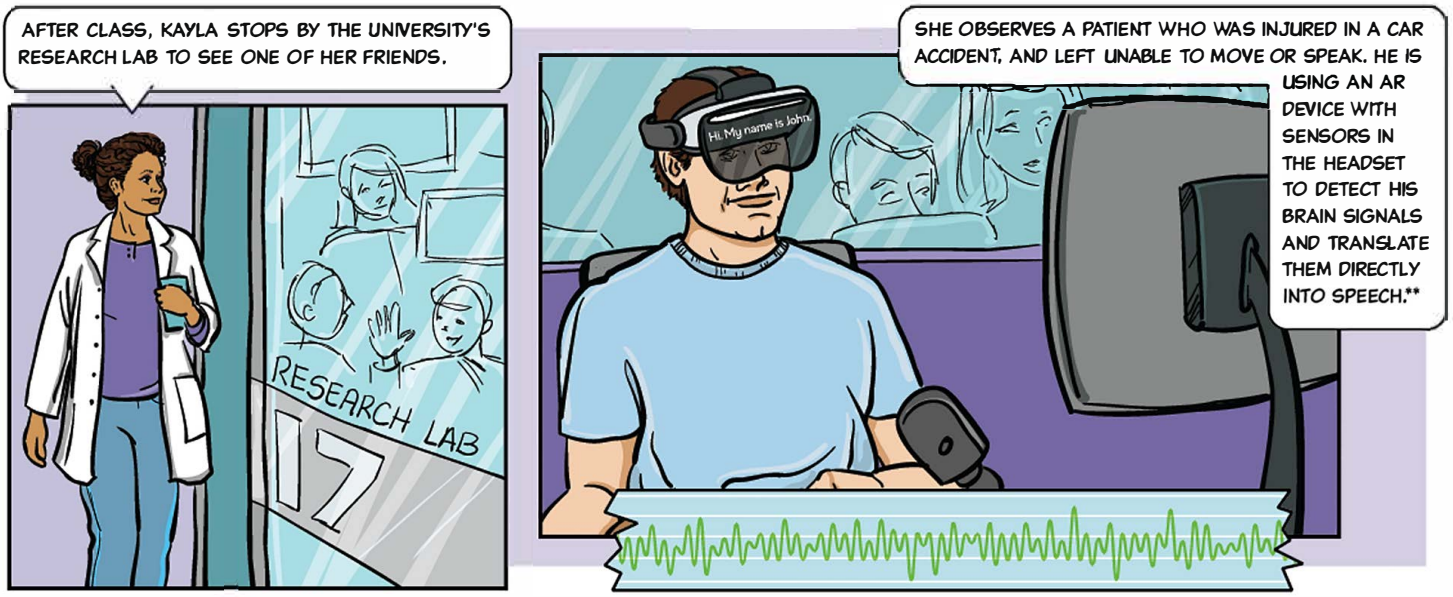
WALKING TO CLASS



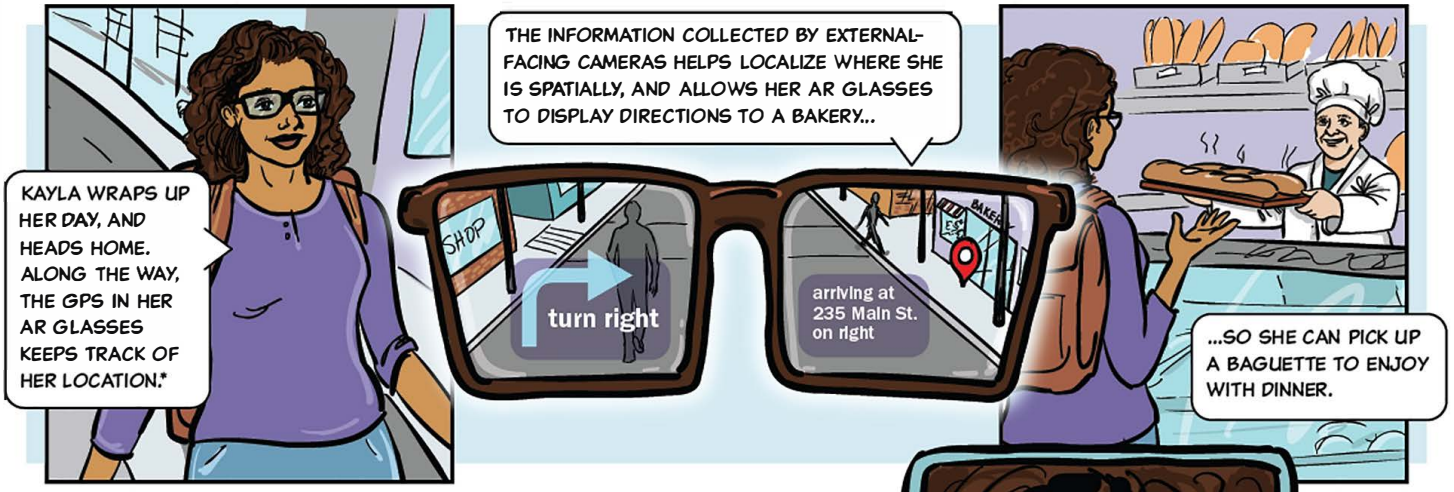
KAYLA'S CLASS AT MEDICAL SCHOOL



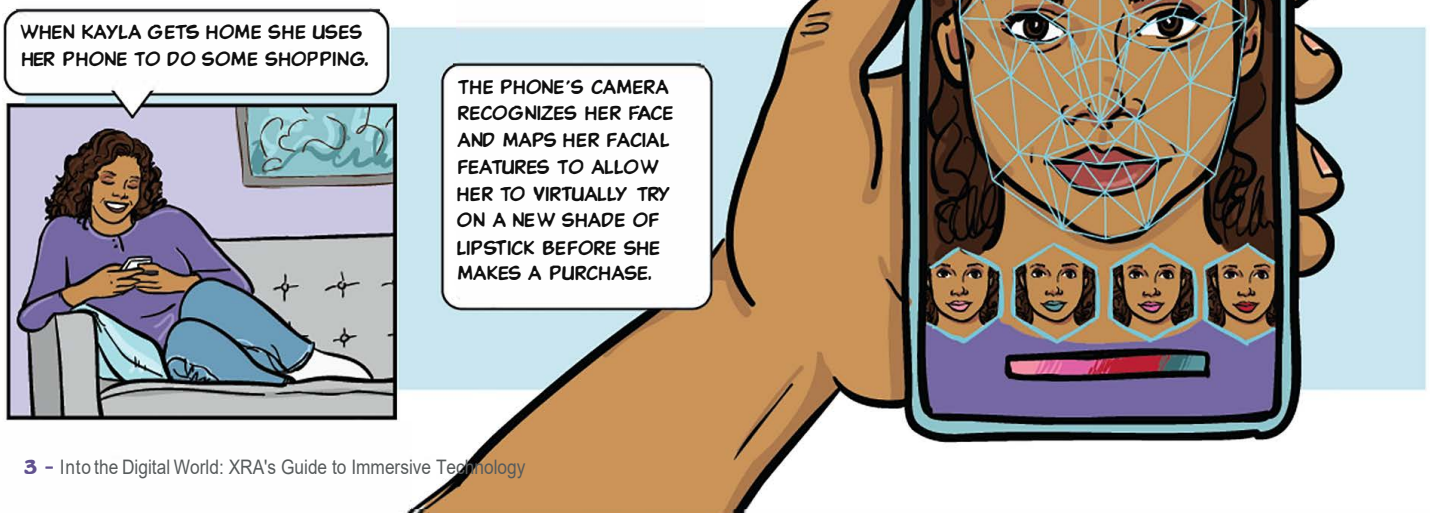
VISITING THE RESEARCH LAB



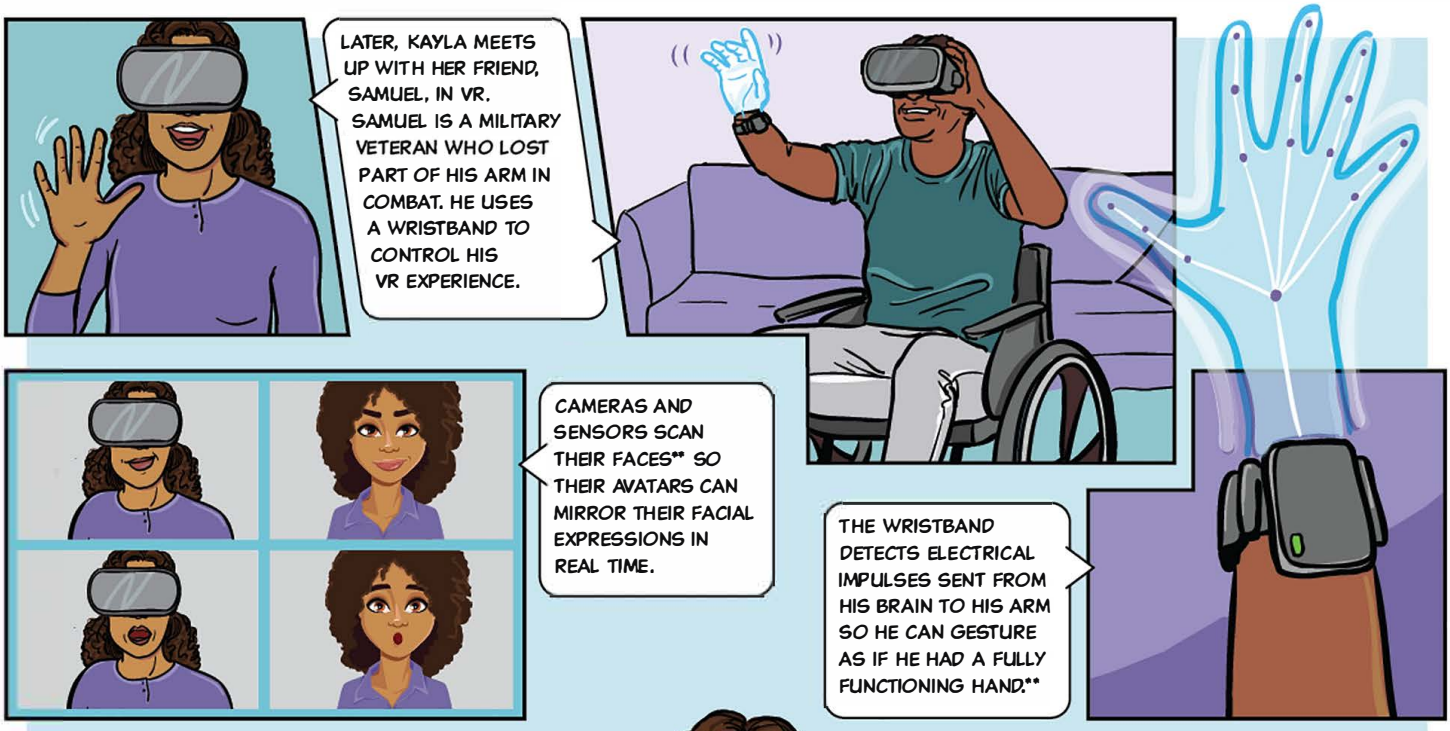
A STOP AT THE BAKERY ON THE WAY HOME



ONLINE SHOPPING



TIME WITH FRIENDS



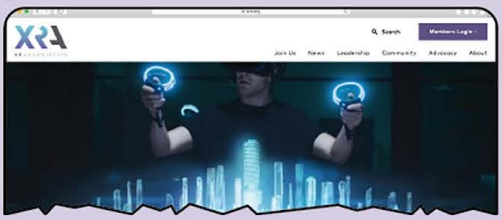
MORE TO KNOW



THIS WAS JUST ONE DAY IN MY LIFE USING XR TECHNOLOGY. THERE IS SO MUCH MORE THIS TECH CAN DO FOR MANY DIFFERENT PEOPLE ALL OVER THE WORLD. FOLLOW ME ON THE WEB AND SOCIAL MEDIA – **#howXRworks** – TO SHOW YOU WHAT ELSE IS AND CAN BE POSSIBLE.

The XR Association exists to promote responsible development and thoughtful advancement of the XR industry (VR, AR, MR).

To meet Kayla online and learn more about XR technology, visit our resource center at **xra.org/howXRworks**



Follow our latest updates on Twitter: **@XRAssociation**

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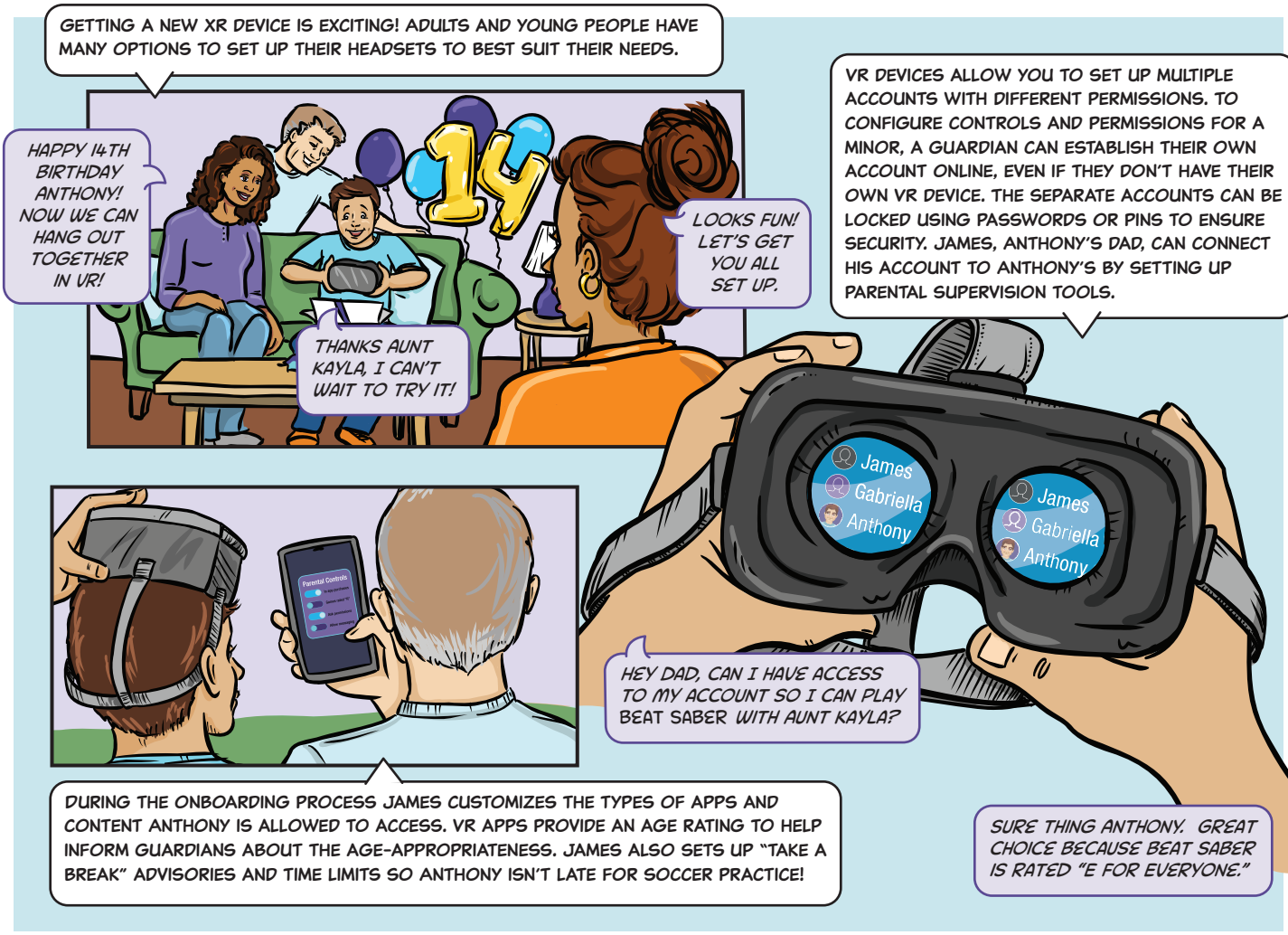
The technologies featured in these use cases may or may not be included in the hardware or software of VR, AR, and MR devices and experiences. Some, like eye-tracking,* are not standard and are emerging features of XR that are not widely used at this time. And others**, like facial tracking, are still only on the horizon.

Customizing Your Immersive Experience IN THE DIGITAL WORLD

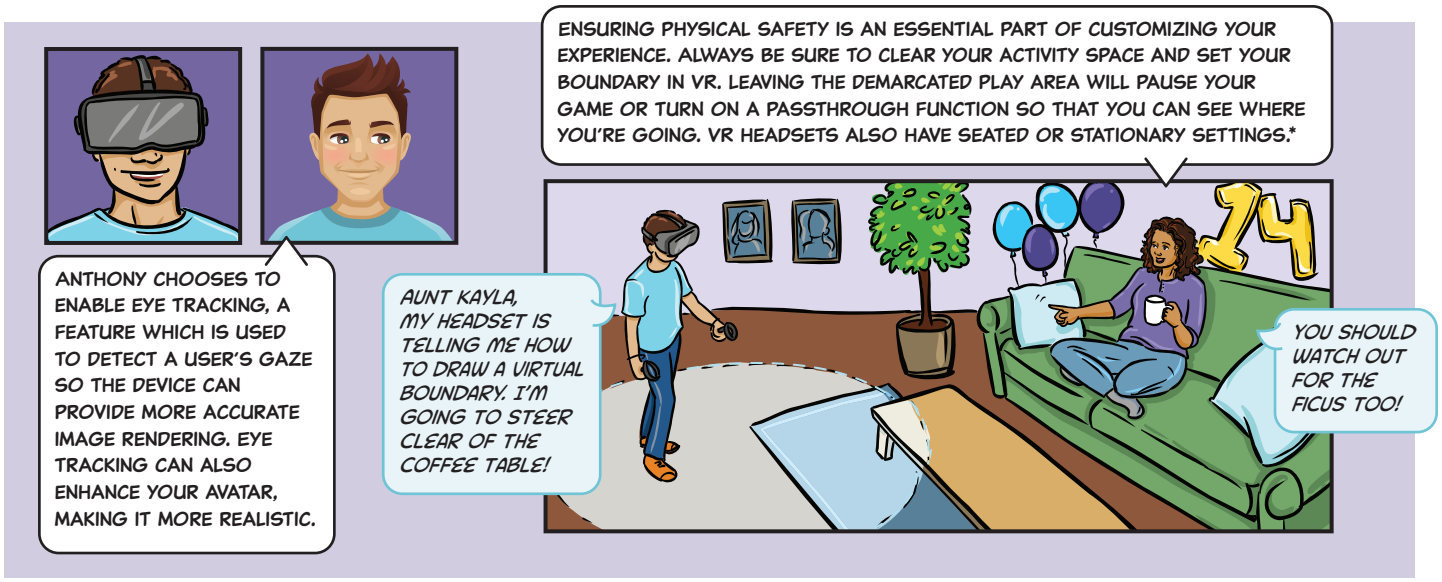
XR ASSOCIATION

XR gives people the ability to scuba dive with sea turtles and explore the galleries of the Louvre from the comfort of their own homes. Feeling safe and secure is an important part of every immersive adventure. Did you know XR technology provides myriad ways for adults and young people to customize their experience so they can rest easy and enjoy themselves? Let's find out how!

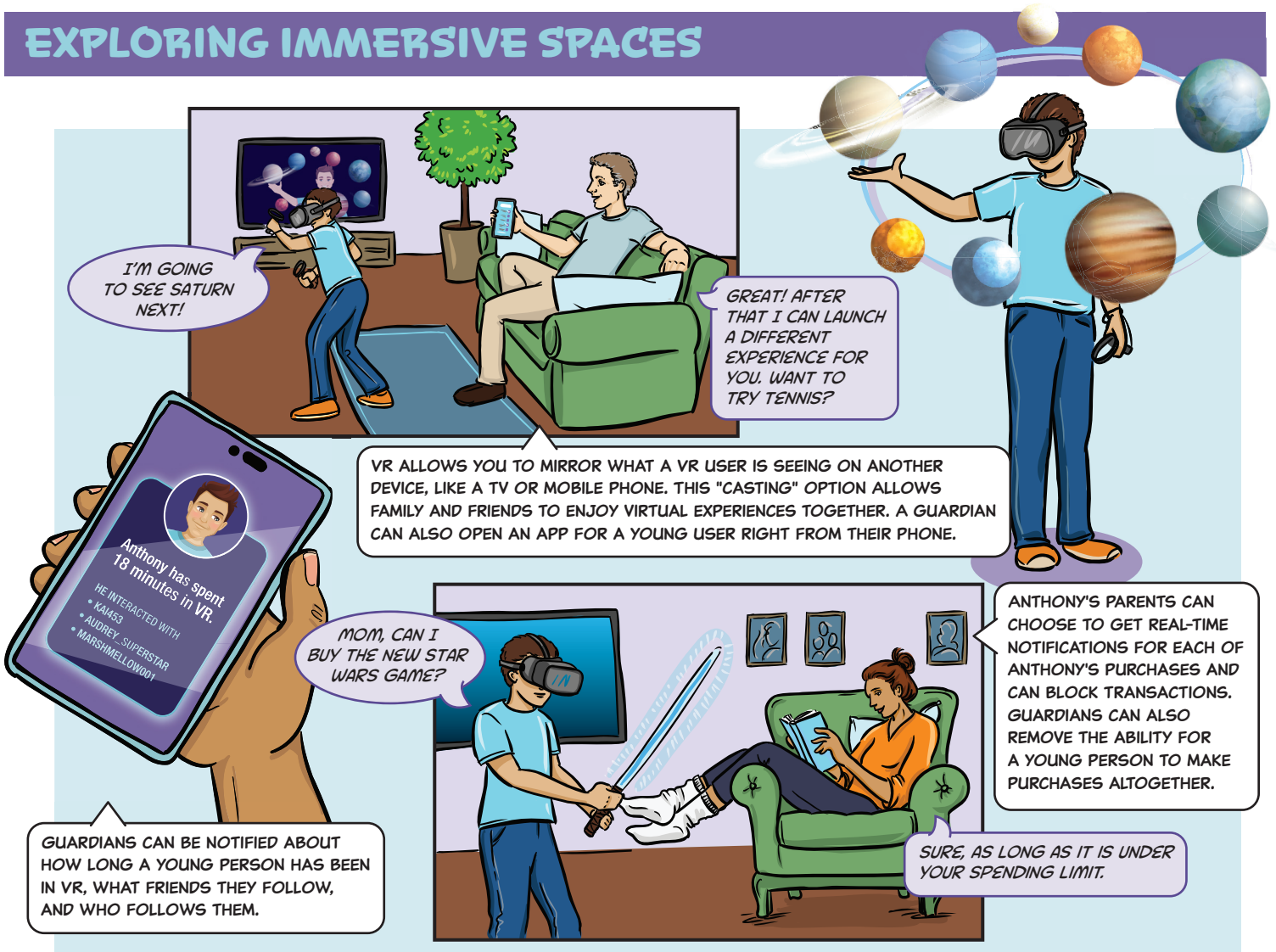
ONBOARDING IN XR



ONBOARDING IN XR CONT.



EXPLORING IMMERSIVE SPACES



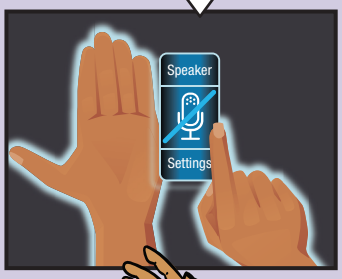
INTERACTING WITH OTHERS – SAFETY & PRIVACY







IN SOME IMMERSIVE EXPERIENCES, USERS CAN ACTIVATE A BOUNDARY AROUND THEIR AVATAR TO KEEP OTHERS FROM ENTERING THEIR PERSONAL SPACE IN A SHARED ENVIRONMENT. THEY CAN ALSO USE AUDIO CONTROLS TO DETERMINE WHO CAN HEAR THEM AND WHO THEY CAN HEAR – FOR EXAMPLE, YOU CAN CHOOSE TO ONLY HEAR AND BE HEARD BY YOUR FRIENDS. YOU CAN ALSO JUST MUTE OTHER AVATARS.



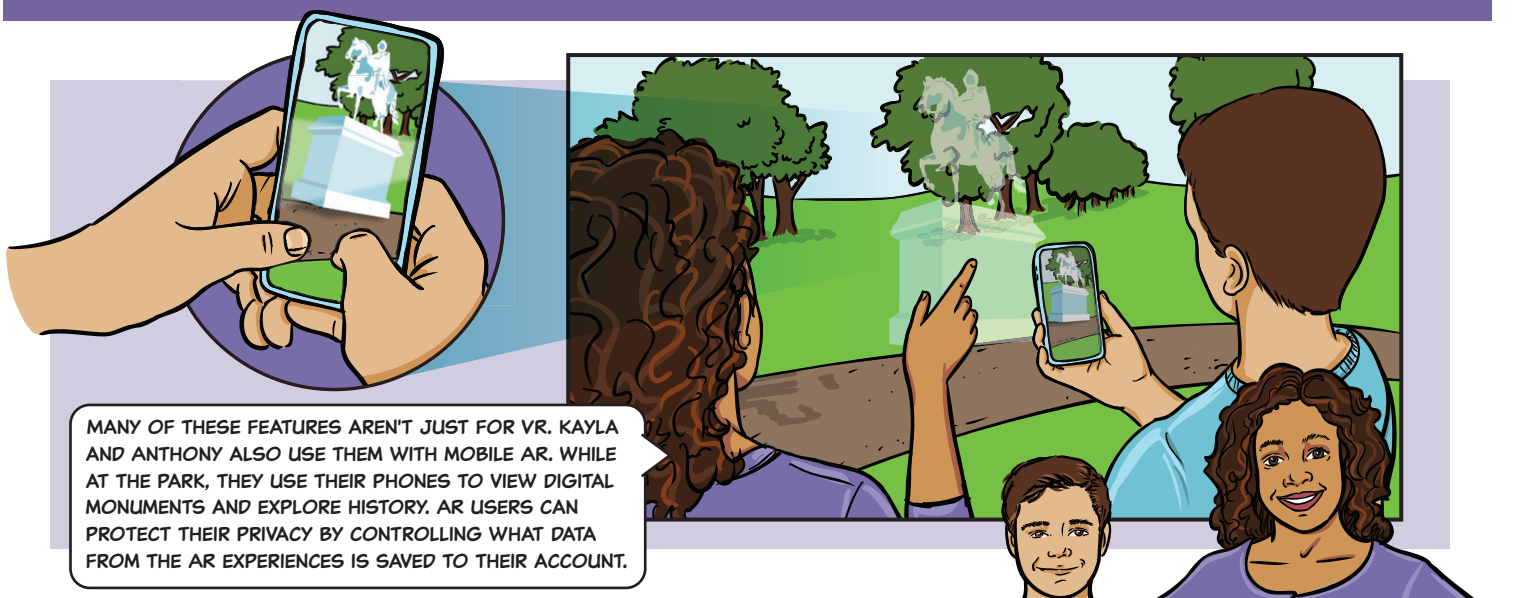
WHILE AT THE VIRTUAL MUSEUM, KAYLA HEARD ANOTHER USER VIOLATING THE PLATFORM'S CODE OF CONDUCT. TO REPORT THE INAPPROPRIATE BEHAVIOR, SHE CAN EASILY SEND A RECORDING OF IT TO THE PLATFORM FOR REVIEW AND ACTION. KAYLA CAN ALSO BLOCK THE OFFENSIVE USER SO SHE WON'T HAVE TO INTERACT WITH THEM AND THEY WON'T BE ABLE TO INTERACT WITH HER.



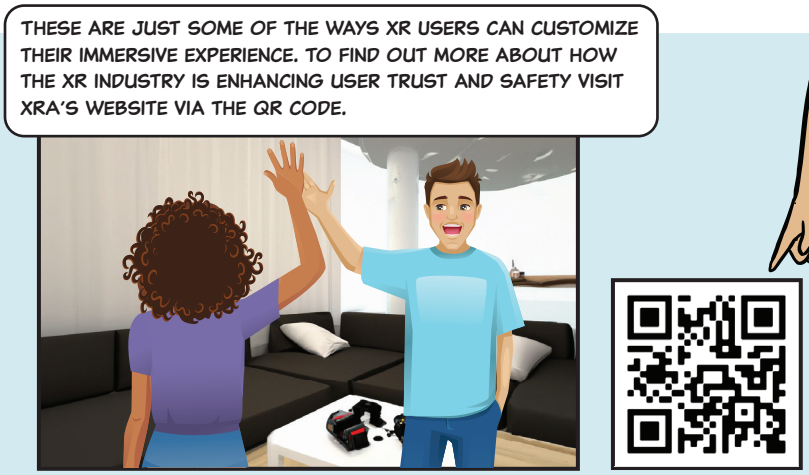
IMMERSIVE ENVIRONMENTS OFFER A VARIETY OF WAYS TO CUSTOMIZE YOUR PRIVACY SETTINGS SO YOU FEEL COMFORTABLE IN YOUR EXPERIENCE. KAYLA PREFERS TO HIDE HER PROFILE, ACTIVITY, AND ACTIVE STATUS. SHE CAN CHANGE THESE SETTINGS AT ANY TIME.



INTERACTING WITH OTHERS – SAFETY & PRIVACY CONT.



FIND OUT MORE



XR DEVELOPERS! CHAPTER TWO OF XRA'S DEVELOPERS GUIDE PROVIDES INDUSTRY-LED BEST PRACTICES FOR DESIGNING RESPECTFUL, SAFE, AND INCLUSIVE IMMERSIVE EXPERIENCES. CHECK IT OUT AT XRA.ORG/DEVELOPERS-GUIDE

The XR Association exists to promote the responsible development and thoughtful advancement of the XR industry (VR, AR, MR).

To meet Kayla online and learn more about XR technology, visit our resource center at **xra.org/howXRworks**

Follow our latest updates on X *(formerly known as Twitter)*: **@XRAssociation**

XR ASSOCIATION

The options and settings in these use cases may not be available on all devices or in all applications. In addition, some features, like eye-tracking, are not standard at this time.

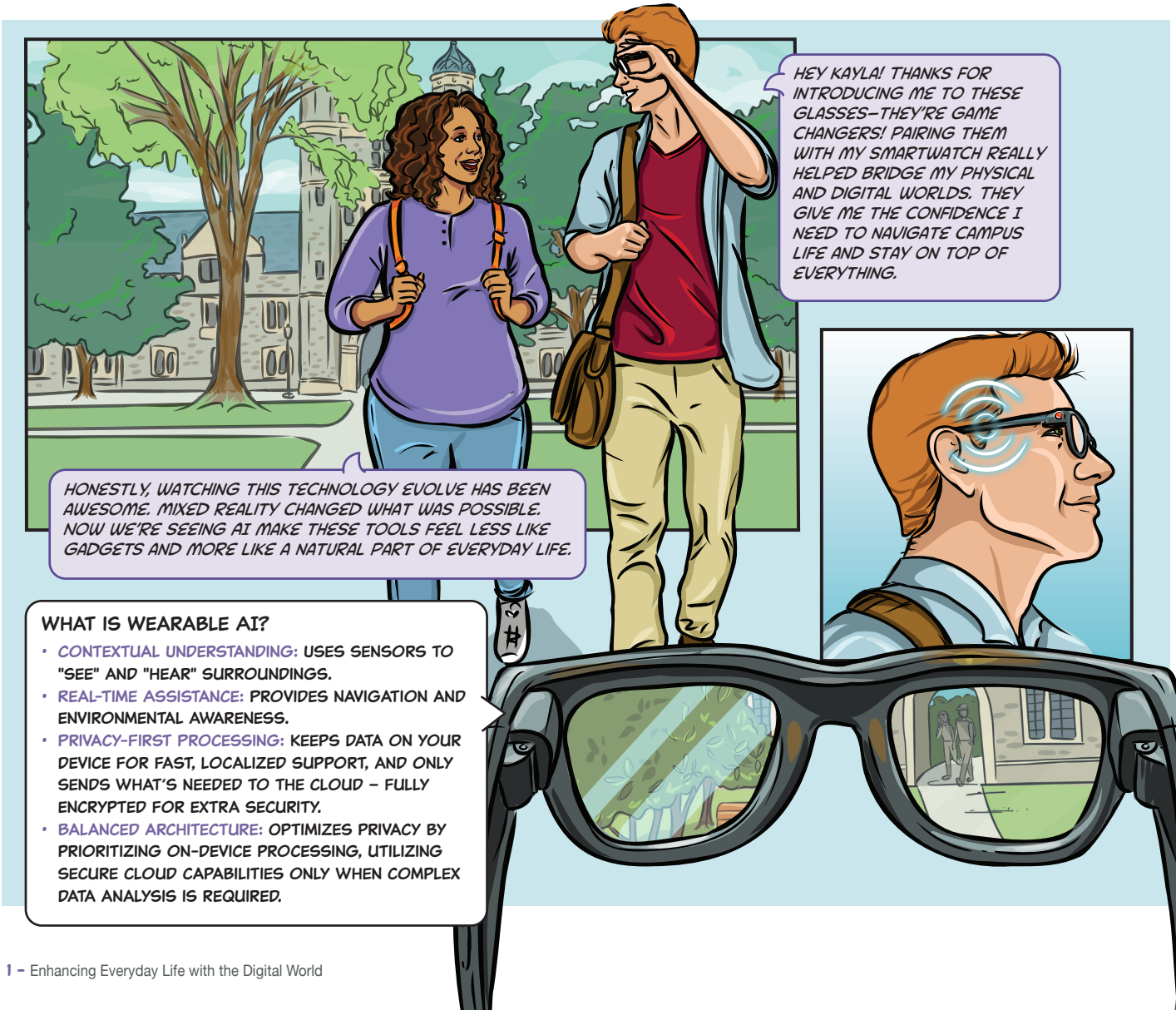
**Some headsets can map your play area automatically*

Enhancing Everyday Life with the Digital World

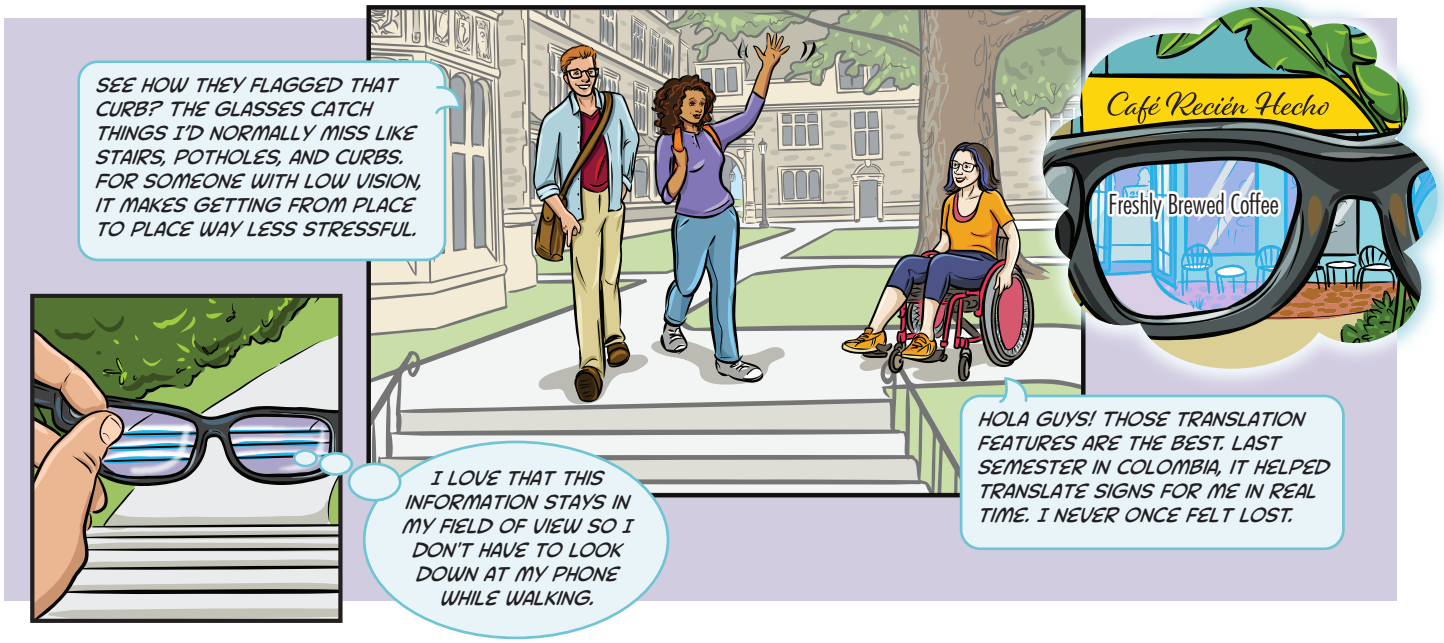
XR ASSOCIATION

The world hasn't changed — but how we experience it has. Today, small devices worn on the body add a digital layer to the physical world. Unlike earlier screens that pull people away from their surroundings, wearable AI blends digital information directly into real space — helping people see, hear, understand, and act in context.

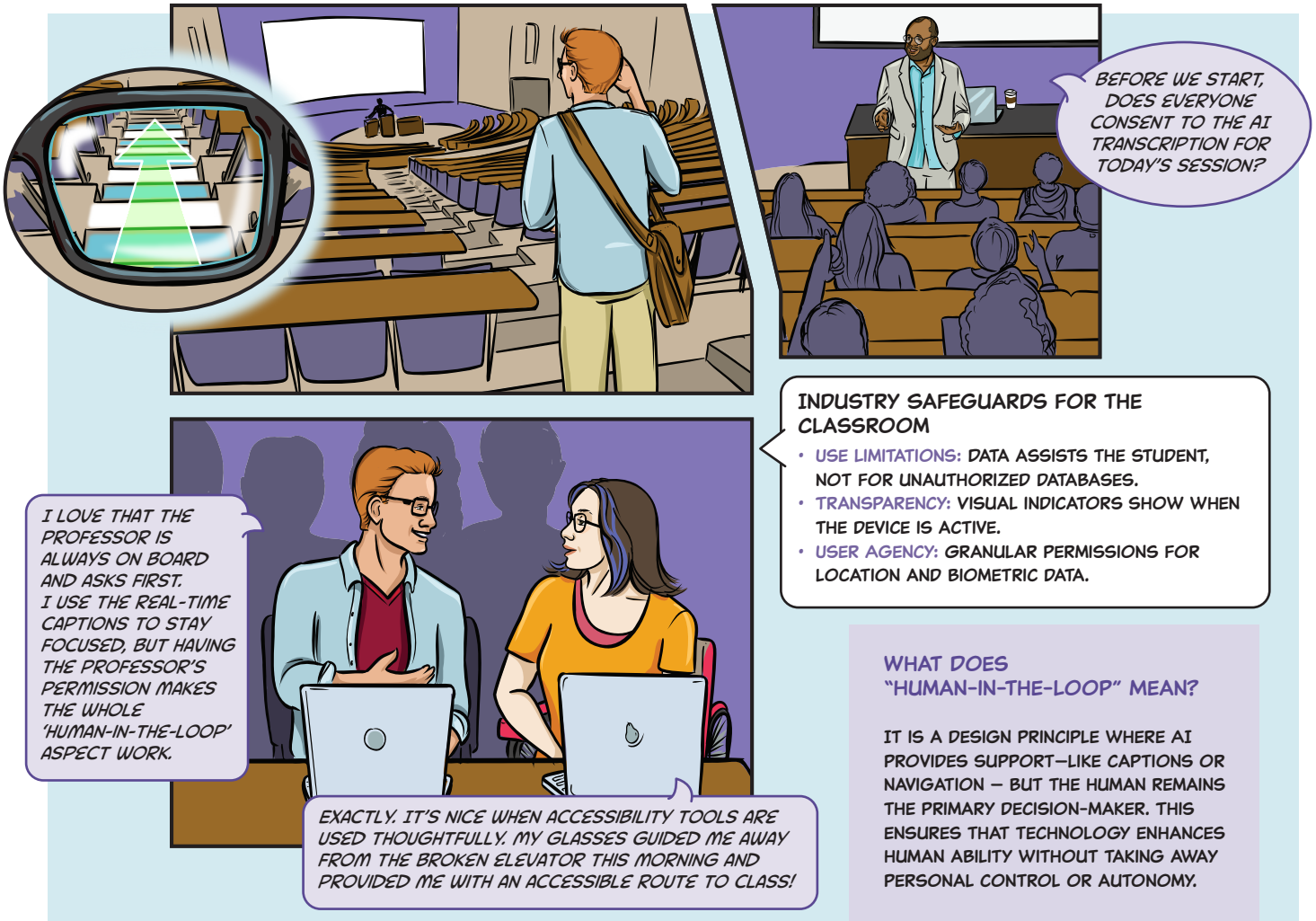
THE MORNING STROLL



LOW VISION & SPATIAL NAVIGATION



THE INCLUSIVE CLASSROOM (MOBILITY & CONSENT)



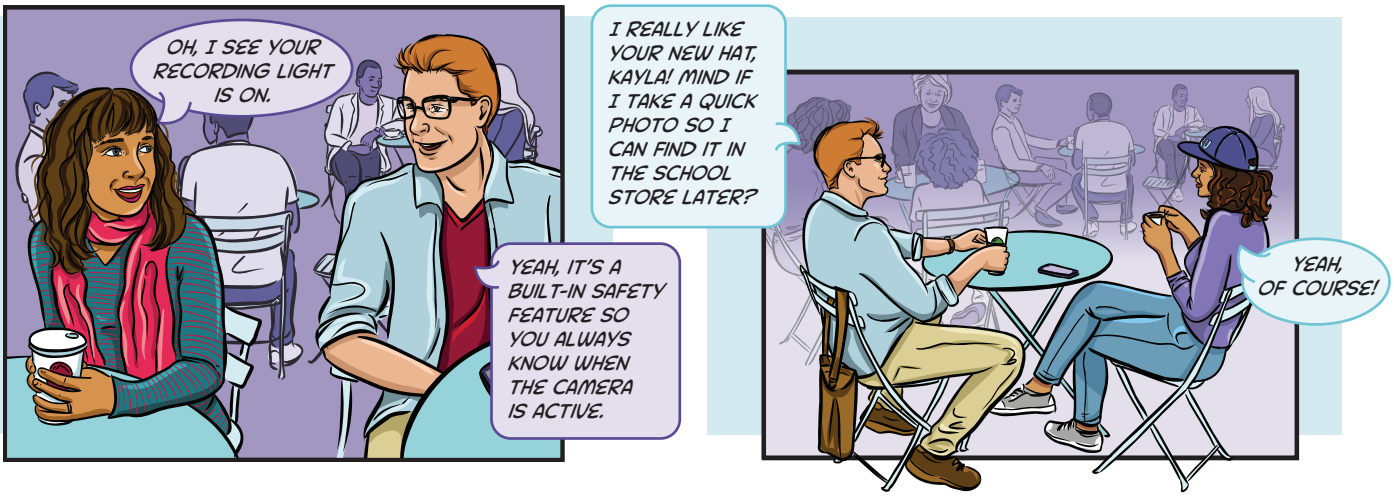
INDUSTRY SAFEGUARDS FOR THE CLASSROOM

- USE LIMITATIONS: DATA ASSISTS THE STUDENT, NOT FOR UNAUTHORIZED DATABASES.
- TRANSPARENCY: VISUAL INDICATORS SHOW WHEN THE DEVICE IS ACTIVE.
- USER AGENCY: GRANULAR PERMISSIONS FOR LOCATION AND BIOMETRIC DATA.

WHAT DOES "HUMAN-IN-THE-LOOP" MEAN?

IT IS A DESIGN PRINCIPLE WHERE AI PROVIDES SUPPORT—LIKE CAPTIONS OR NAVIGATION — BUT THE HUMAN REMAINS THE PRIMARY DECISION-MAKER. THIS ENSURES THAT TECHNOLOGY ENHANCES HUMAN ABILITY WITHOUT TAKING AWAY PERSONAL CONTROL OR AUTONOMY.

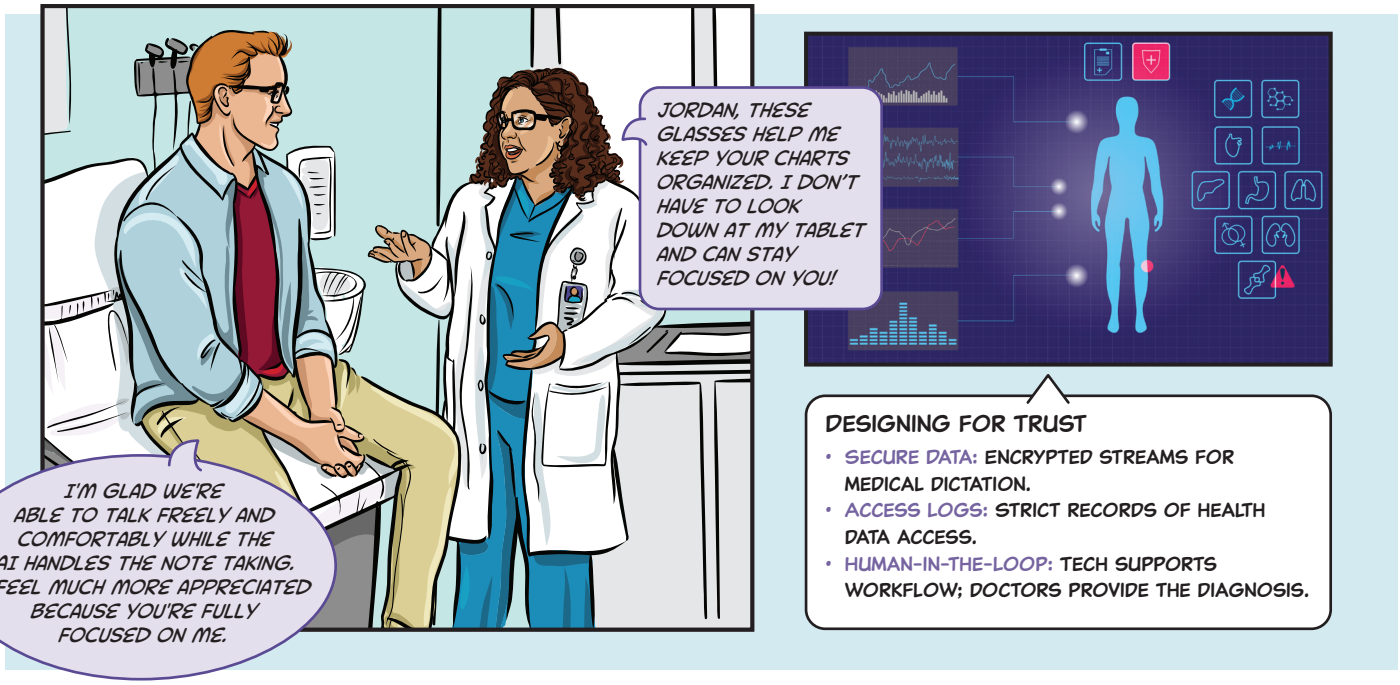
SOCIAL NORMS & BYSTANDER PRIVACY



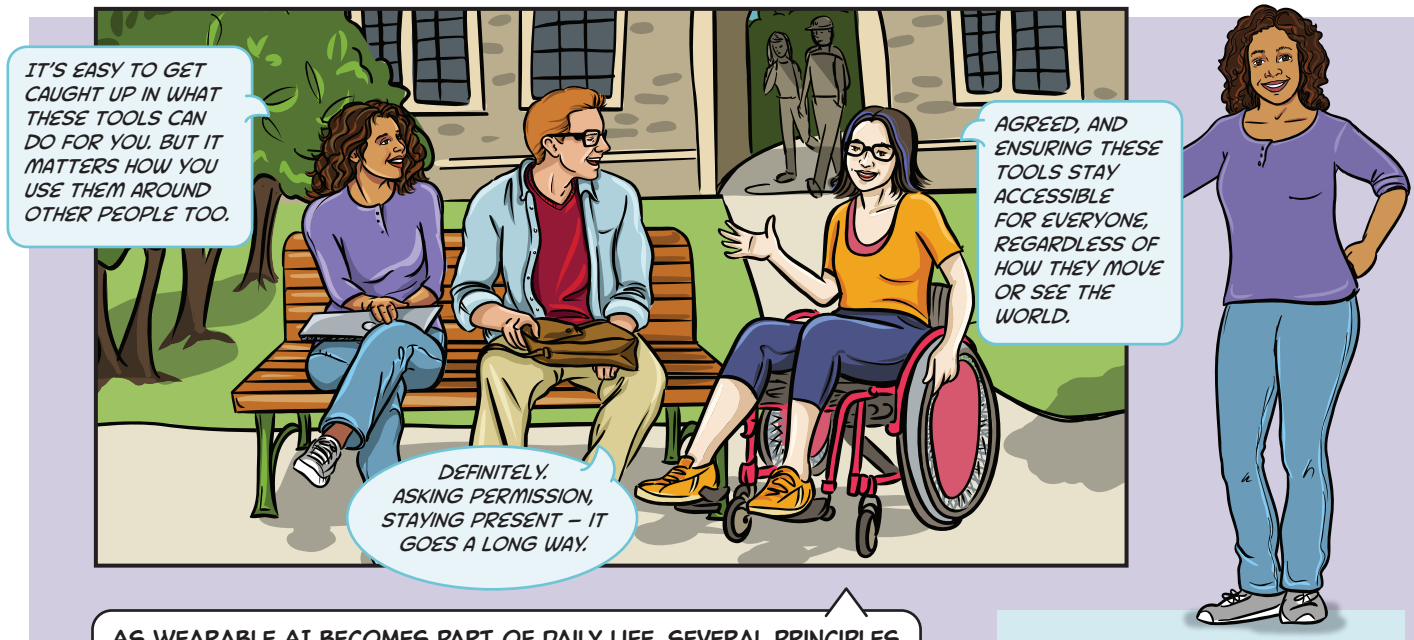
SMART SPENDING (OPT-IN AI)



ANNUAL PHYSICAL (THE CLINICAL CONNECTION)



PRINCIPLES FOR THE DIGITAL WORLD



AS WEARABLE AI BECOMES PART OF DAILY LIFE, SEVERAL PRINCIPLES GUIDE THE INDUSTRY'S COMMITMENT TO RESPONSIBLE INNOVATION:

- ACCESSIBILITY AND INCLUSION: DESIGNING SO THAT PEOPLE OF ALL ABILITIES CAN BENEFIT.
- PRIVACY AND SECURITY: PROTECTING BOTH THE USER AND THE BYSTANDER THROUGH TRANSPARENT DESIGN.
- SAFETY BY DESIGN: PROACTIVELY ADDRESSING PHYSICAL AND DIGITAL RISKS.
- TRANSPARENCY: PROVIDING CLEAR CONTROLS OVER FEATURES AND DATA USE.

THE DIGITAL WORLD IS NO LONGER SEPARATE FROM THE PHYSICAL ONE; IT IS LAYERED INTO IT. CONFIDENT AND INFORMED, THIS GENERATION IS SHAPING THE NORMS FOR A WORLD WHERE TECHNOLOGY HELPS US CONNECT MORE DEEPLY WITH OUR SURROUNDINGS.

FIND OUT MORE

READ OUR OTHER "INTO THE DIGITAL WORLD" COMICS!

DIVE FURTHER INTO THE WORLD OF KAYLA AS SHE DEMYSTIFIES HOW XR TECHNOLOGY FUNCTIONS AND IS USED. CHECK IT OUT AT XRA.ORG/HOWXRWORKS



The XR Association promotes the dynamic growth of the XR industry which includes virtual reality, augmented reality, mixed-reality, and future immersive technology.

Follow our latest updates on X: **@XRAssociation**

XR ASSOCIATION

The options and settings in these use cases may not be available on all devices or in all applications. In addition, some features, like smart-spending or eye-tracking, are not standard at this time.