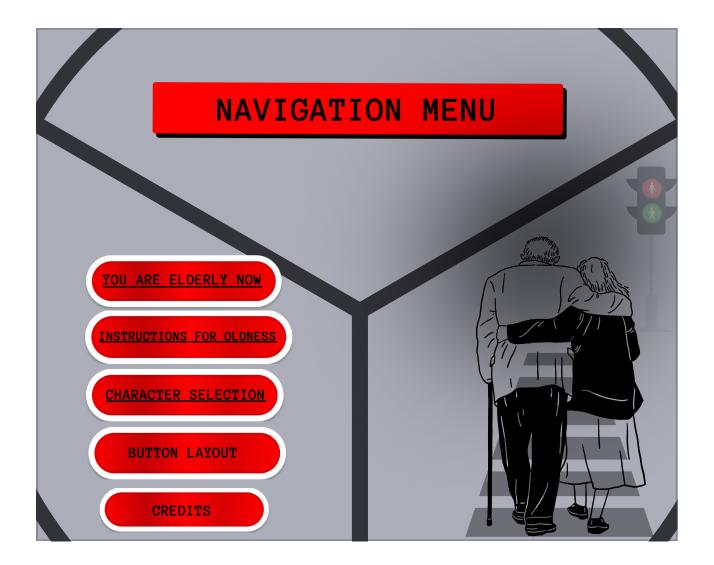
AGING PERSPECTIVES: WALK IN THEIR SHOES. A ROLE-PLAY SIM FOR BUILDING EMPATHY.



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Objective: Students will demonstrate understanding by interacting with scenarios where they must respond empathetically to challenges faced by aging individuals.

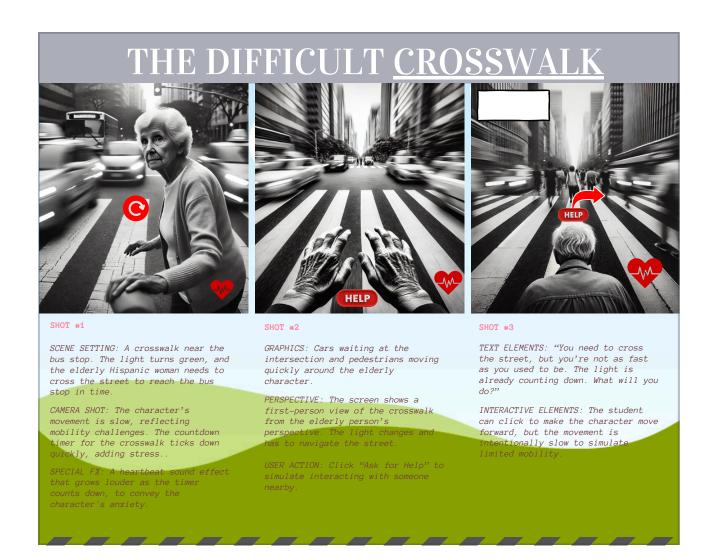
Simulation Tie-In: Students will face simulated daily challenges experienced by older adults and will need to make decisions on how to effectively respond!

Instructions for Oldness:

https://purdue0-

my.sharepoint.com/:w:/r/personal/jboursie_purdue_edu/Documents/672%20Pre-Training%20Sim%20Game%20Overview.docx?

d=wa581ccb299ad43859a45433c43085969&csf=1&web=1&e=TzpMgg



Students will demonstrate awareness of the physical and emotional challenges faced by elderly individuals crossing busy streets, including mobility limitations, vision impairments, distractions, and accessibility issues.

Students will evaluate the role of external factors, such as pedestrian signals, street design, and other people's behaviors, in contributing to the character's experience of crossing the road.

Empathy-Inducing Blurb from Research: According to Decety and Jackson (2006), perspective-taking—imagining oneself in someone else's situation—can significantly increase empathy. In this scenario, the elderly Hispanic female may face challenges such as poorly timed crosswalk signals, difficulty seeing oncoming traffic, or drivers failing to yield, highlighting how navigating public infrastructure can be especially challenging for elderly individuals. Experiencing these challenges firsthand helps learners understand how external factors influence safety and confidence for elderly pedestrians.

Decety, J., & Jackson, P. L. (2006). A social-neuroscience perspective on empathy. Current

Directions in Psychological Science, 15(2), 54-58. https://doi.org/10.1111/j.0963-7214.2006.00406.x

Scenario Flow:

Initial View: The student sees the crosswalk and the timer counting down. The camera focuses on the crosswalk light turning green.

Mobility Challenge: The character moves slowly, and the timer quickly counts down, creating a sense of urgency.

User Actions: The student has the option to:

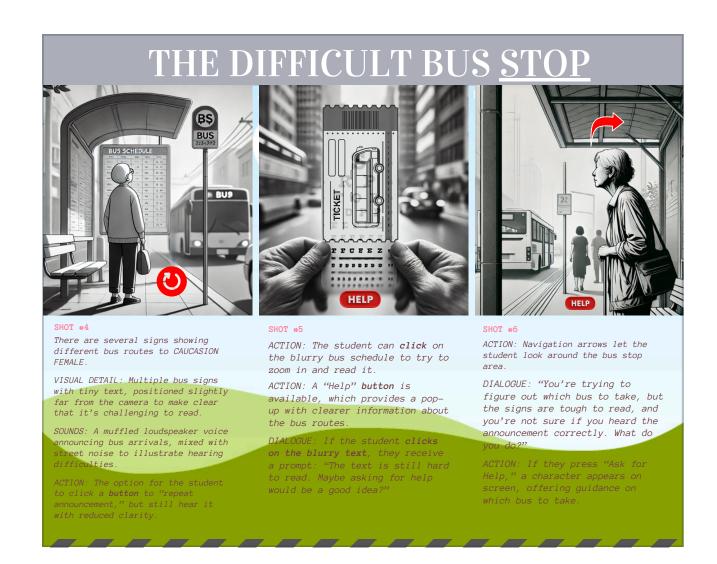
Click repeatedly to move the character across the street.

Press the "Request Assistance" button to get help crossing.

Feedback:

If the student clicks to move, the character advances slowly, and a prompt appears: "The timer is running out. Maybe asking for help would be a good idea?"

If they press "Request Assistance," a passerby helps the character cross safely.

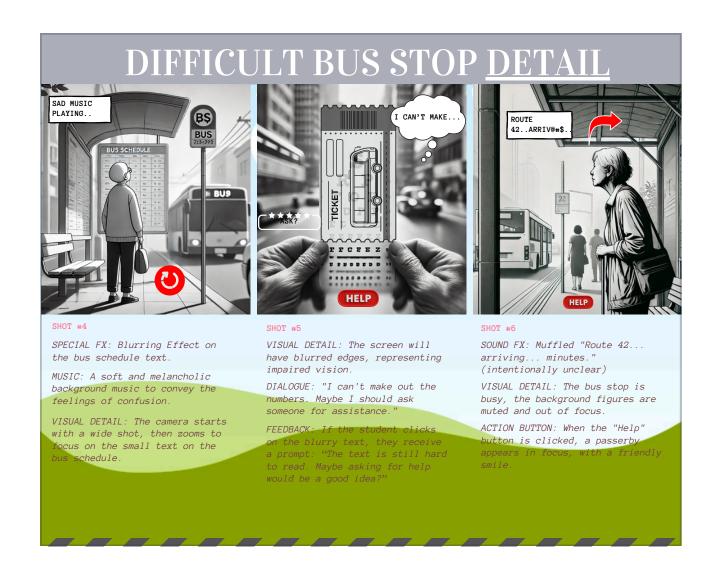


Students will identify and describe the challenges faced by elderly individuals waiting for public transportation, focusing on issues of mobility, safety, accessibility, and social isolation.

Students will analyze and reflect on the emotions experienced by the character, fostering an understanding of how physical limitations and fear of public spaces can impact an elderly individual's behavior.

Empathy-Inducing Blurb from Research: Research suggests that experiencing or observing realistic social challenges can help individuals develop empathy (Hojat, 2009). Waiting in public spaces, such as a bus stop, can create feelings of vulnerability, especially for elderly individuals who may have mobility issues or fear falling. By role-playing this scene, students can better understand the physical and emotional discomfort that comes with navigating public spaces independently as an elderly person.

Hojat, M. (2009). Ten approaches for enhancing empathy in health and human services cultures. Journal of Health and Human Services Administration, 31(4), 412-450.



Key Actions & Events: The elderly person stands at the bus stop, squinting at a bus schedule with small, blurry print.

Audio-Visual Elements: Background noises include chatter, traffic, and muffled bus announcements.

Dialogue: None, but include text prompt: "Which bus am I supposed to take?"

Sound Effects: Indistinct chatter, traffic noise, muffled announcement.

Visuals: Blurred bus schedules and distant outlines of the busy city.

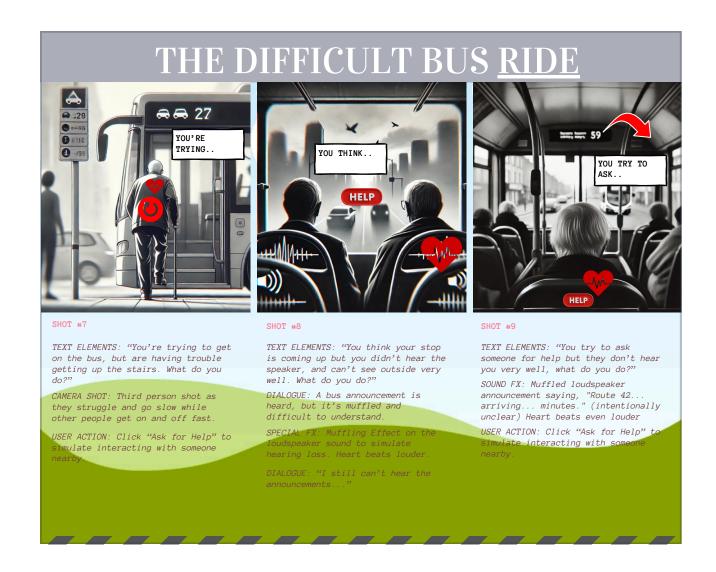
Technical Details:

Camera Shot: First-person, blurred view from the elderly character.

Camera Movement: Subtle swaying to indicate character's effort in focusing.

Special Effects: Blurring effect to simulate visual impairments.

Notes: Emphasize the sense of vulnerability and sensory overload.



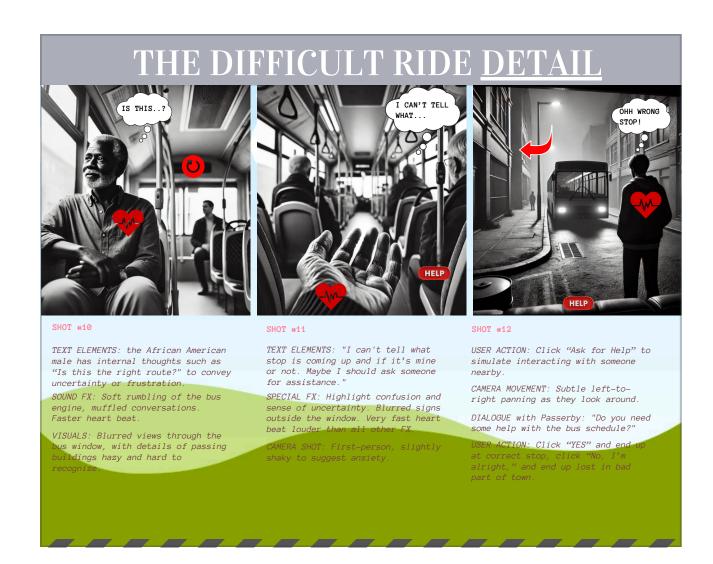
Students will recognize and explain the social dynamics present when elderly individuals use public transportation, such as mobility challenges, lack of seating, and potential biases.

Students will propose two strategies for improving inclusivity and comfort for elderly passengers, focusing on interactions between the character and other commuters.

Empathy-Inducing Blurb from Research: Studies indicate that elderly individuals often face challenges such as difficulty finding seating, being ignored by other passengers, or experiencing subtle forms of discrimination (Sue et al., 2007). In this scene, students will role-play as an elderly African American male on a crowded bus, dealing with behaviors that could include being overlooked for a seat or facing dismissive attitudes. Understanding these dynamics helps students connect emotionally to these experiences, fostering deeper empathy for elderly individuals who rely on public transportation.

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice.

| American Psychologist, 62(4), 271-286. https://doi.org/10.1037/0003-066X.62.4.271 |
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Key Actions & Events: The elderly person is sitting on the bus, looking out and around, unsure of where they are.

Audio-Visual Elements:

Dialogue: "Is this the right route?"

Sound Effects: Soft rumbling of the bus engine, muffled conversations.

Visuals: Blurred views through the bus window, with details of passing buildings hazy and hard to recognize.

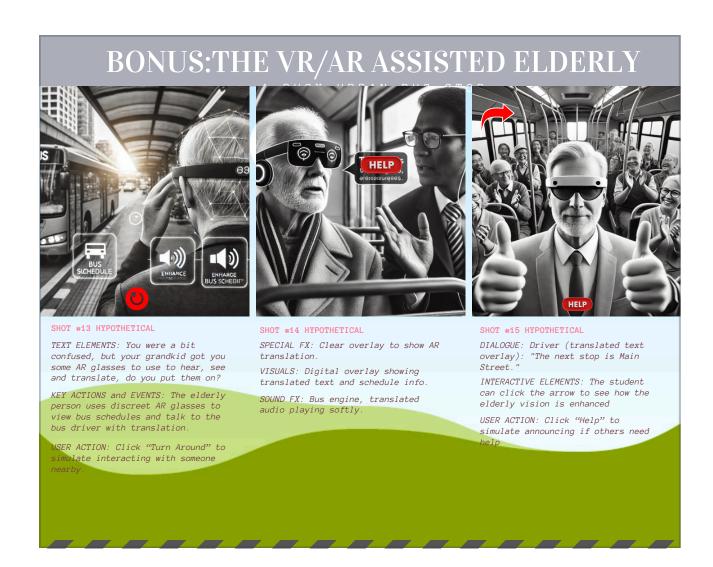
Technical Details:

Camera Shot: First-person, slightly shaky to suggest anxiety.

Camera Movement: Subtle left-to-right panning as they look around.

Special Effects: Blurred signs outside the window.

Notes: Highlight confusion and sense of uncertainty.



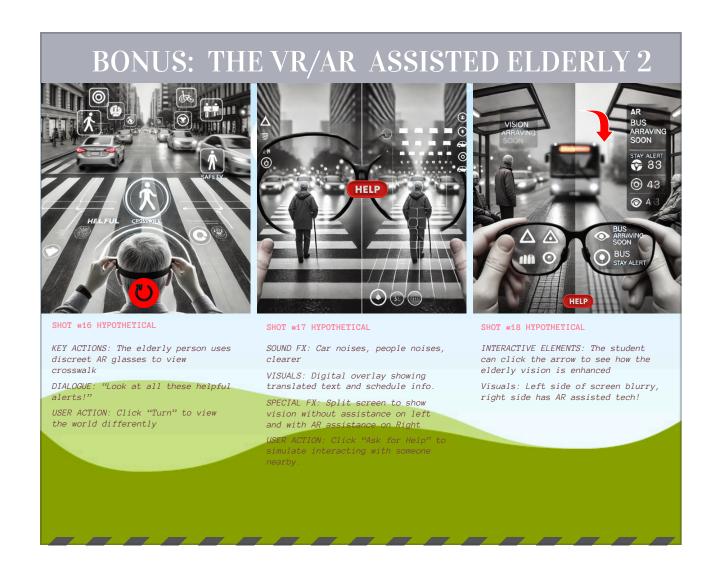
Students will simulate and experience the physical challenges faced by elderly individuals through VR technology, focusing on mobility issues, visual impairments, and difficulties with daily activities.

Students will analyze and propose strategies for addressing the challenges they experienced in the VR simulation, fostering an understanding of how assistive technologies can improve the quality of life for elderly individuals.

Empathy-Inducing Blurb from Research:

Research by Bachen et al. (2012) shows that immersive simulations, such as VR, can significantly enhance empathy by allowing participants to experience challenges firsthand. In this scenario, the Caucasian male character uses VR glasses to simulate the physical limitations of elderly individuals—such as reduced vision, slower reflexes, and mobility challenges. This immersive experience helps students understand the real-life struggles of the elderly, promoting empathy and encouraging them to think of innovative solutions to improve elderly care and access ibility.

Bachen, C. M., Hernandez-Ramos, P. F., & Raphael, C. (2012). Simulating real lives: Promoting global empathy and interest in learning through simulation games. Simulation & Gaming, 43(4), 437-460. https://doi.org/10.1177/1046878111432108



Key Actions & Events: The elderly person uses discreet AR glasses to view bus schedules and talk to the bus driver with translation.

Audio-Visual Elements:

Dialogue: Driver (translated text overlay): "The next stop is Main Street."

Sound Effects: Bus engine, translated audio playing softly.

Visuals: Digital overlay showing translated text and schedule info.

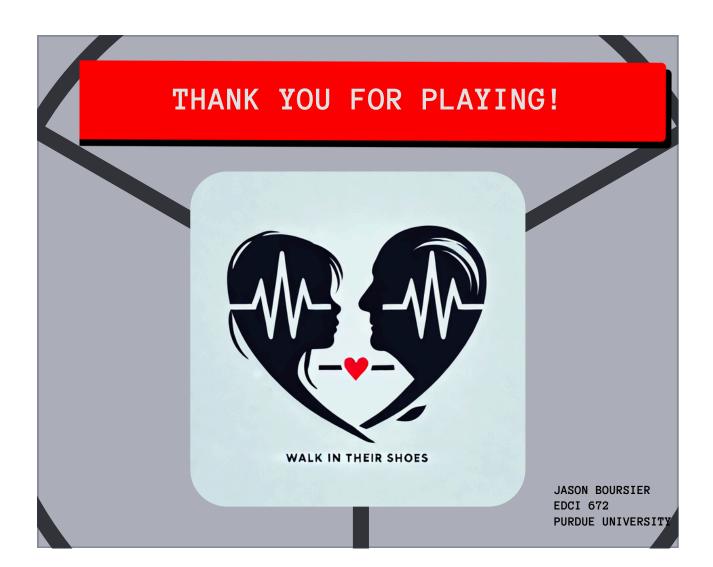
Technical Details:

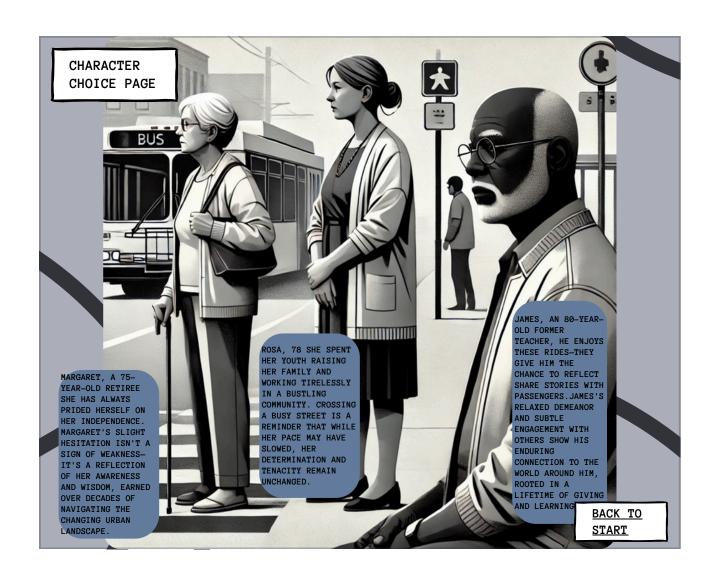
Camera Shot: First-person.

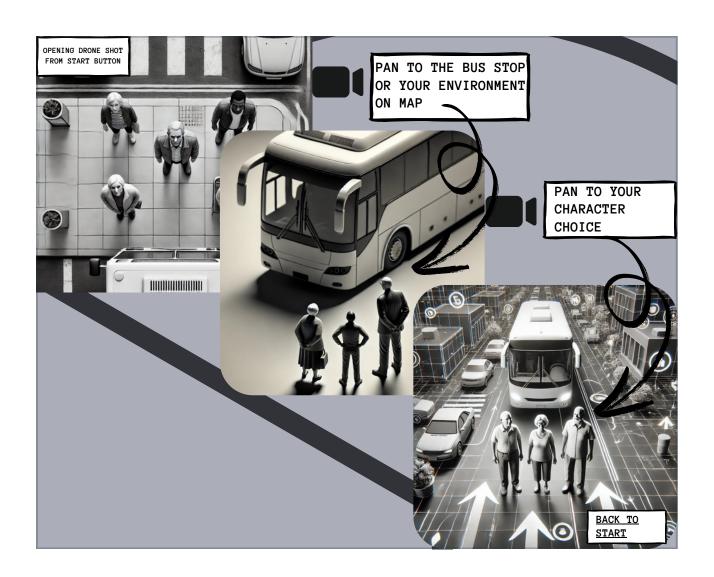
Camera Movement: Slight tracking motion towards the bus driver.

Special Effects: Clear overlay to show AR translation.

| Notes: Highlight the benefits of AR glasses in providing clarity and accessibility. |
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THE SIMULATION I DESIGNED IS ENTITLED AGING PERSPECTIVES: WALK IN THEIR SHOES AND ADDRESSES ALL STAKEHOLDERS WHILE WITHIN THE TIME AND BUDGET CONSTRAINTS FOR SEVERAL REASONS. THE AUDIENCE WILL BENEFIT FROM AN IMMERSIVE, ENGAGING GAME THAT COMPLEMENTS THE CURRICULUM BEYOND TRADITIONAL READING AND INTERVIEWS WITH ELDERLY INDIVIDUALS. THE FIRST-PERSON ROLE-PLAY, ENHANCED BY ELEMENTS LIKE BLURRED VISION, INCREASED HEART RATES, AND OPTIONS TO REQUEST ASSISTANCE, OFFERS AN EMPATHETIC EXPERIENCE THAT ALIGNS WITH LORENA'S GOAL OF FOSTERING UNDERSTANDING FOR THE ELDERLY. IT ALSO RESPECTS SUZIE'S DESIGN TOOL LIMITATIONS, AS DETAILED FACIAL EXPRESSIONS AREN'T ESSENTIAL FOR COMMUNICATING THE CORE LEARNING OBJECTIVES, MEETING ADAM'S PREFERENCE FOR A STRUCTURED, SCAFFOLDED LEARNING EXPERIENCE.

TO MANAGE DEVELOPMENT WITHIN TIME AND BUDGET CONSTRAINTS, I PROPOSE SIMPLE BLACK—AND—WHITE GRAPHICS, SIMILAR TO A SKETCH ARTIST'S STYLE, WITH RED SIGNALING BUTTONS TO GUIDE PLAYERS. THE GAME IS DESIGNED WITHIN A SINGLE 3D ENVIRONMENT THAT ACCOMMODATES FOUR SCENARIOS, KEEPING DEVELOPMENT TIME MANAGEABLE. THE INCLUSION OF THREE DIVERSE CHARACTERS, WITH KNOWLEDGE BLURBS AND REFERENCES AFTER EACH SCENARIO, SHOULD SATISFY SMES LIKE JOHANNA AND LORENA. EACH STORYLINE EMPHASIZES EVERYDAY CHALLENGES FACED BY THE ELDERLY, ENSURING EMOTIONAL RESONANCE AND ALIGNMENT WITH THE PROJECT'S CORE OBJECTIVE.

SEVERAL MULTIMEDIA PRINCIPLES GUIDED MY DESIGN CHOICES. THE PERSONALIZATION PRINCIPLE IS APPLIED THROUGH CONVERSATIONAL, FIRST— AND SECOND—PERSON LANGUAGE, WITH POLITE SPEECH AND CONTRACTIONS. PRE—TRAINING IS INTRODUCED ON THE TITLE SCREEN, WHERE STUDENTS MUST SELECT THE "INSTRUCTIONS FOR OLDNESS" BUTTON BEFORE BEGINNING GAMEPLAY. THE SEGMENTING PRINCIPLE IS ALSO INCORPORATED, AS THE GAME IS SELF—PACED. PLAYERS START BY CHOOSING A CHARACTER FROM A DESCRIPTION ON THE CHARACTER INTRODUCTION SCREEN, INITIATING GAMEPLAY WITH A THIRD—PERSON DRONE VIEW THAT TRANSITIONS TO A FIRST—PERSON PERSPECTIVE. THIS STRUCTURE PROMOTES ACCESSIBILITY AND ENGAGEMENT, OFFERING AN INTUITIVE AND IMPACTFUL LEARNING EXPERIENCE.

The simulation I designed is entitled Aging Perspectives: Walk in Their Shoes and addresses all stakeholders while within the time and budget constraints for several reasons. The audience will benefit from an immersive, engaging game that complements the curriculum beyond traditional reading and interviews with elderly individuals. The first-person role-play, enhanced by elements like blurred vision, increased heart rates, and options to request assistance, offers an empathetic experience that aligns with Lorena's goal of fostering understanding for the elderly. It also respects Suzie's design tool limitations, as detailed facial expressions aren't essential for communicating the core learning objectives, meeting Adam's preference for a structured, scaffolded learning experience.

To manage development within time and budget constraints, I propose simple black-and-white graphics, similar to a sketch artist's style, with red signaling buttons to guide players. The game is designed within a single 3D environment that accommodates four scenarios, keeping development time manageable. The inclusion of three diverse characters, with knowledge blurbs and references after each scenario, should satisfy SMEs like Johanna and Lorena. Each storyline emphasizes everyday challenges faced by the elderly, ensuring emotional resonance and alignment with the project's core objective.

Several multimedia principles guided my design choices. The personalization principle is applied through conversational, first- and second-person language, with polite speech and contractions. Pre-training is introduced on the title screen, where students must select the "instructions for oldness" button before beginning gameplay. The segmenting principle is also incorporated, as the game is self-paced. Players start by choosing a character from a description on the character introduction screen, initiating gameplay with a third-person drone view that transitions to a first-person perspective. This structure promotes accessibility and engagement, offering an intuitive and impactful learning experience.