

The background is a dark blue gradient with a subtle pattern of white dots. Overlaid on the left side are several concentric circles and arcs in a lighter blue color. Some of these arcs have degree markings, such as 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, and 260. There are also small arrows pointing in various directions, suggesting a sense of rotation or movement.

DSN 6400 4 WEEK PROJECT

ABBY AYERS AND TORI CAMPBELL

RESEARCH QUESTION

- HOW DOES THE COMBINATION OF MOTION CAPTURE AND VIRTUAL REALITY ENHANCE THE FOSTERING OF EMPATHY IN ELEMENTARY SCHOOL LITERATURE AS AN EDUCATIONAL TOOL?

ABBY

- HOW DOES USER INTERACTION WITH ENVIRONMENTAL ELEMENTS REINFORCE INFORMATIONAL TRANSFER?
- WHAT FORMS OF NAVIGATION PROMOTE EXPLORATION OF A NARRATIVE SCENE IN A VIRTUAL ENVIRONMENT?

TORI

- WHAT QUALITIES OF ENHANCED PERFORMANCE BETTER IMMERSE AUDIENCE MEMBERS IN A STORY?
- HOW CAN THE USE OF MOTION CAPTURE IN A VIRTUAL ENVIRONMENT ENHANCE THE FEELING OF FLOW WITHIN A NARRATIVE?

OBJECTIVES

- TRYING TO ENHANCE THE 'EXPERIENCE OF STORY' THROUGH A STATE OF IMMERSION AND INTERACTION
- GETTING OUR AUDIENCE TO HAVE AN EMOTIONAL REACTION OF EMPATHY

ABBY

- EXPLORE FORMS OF USER NAVIGATION THROUGHOUT THE SCENE
- CREATE FUNCTIONAL UI MENUS
- SET UP ANIMATION CONTROLS FOR MOTION CAPTURE CHARACTERS

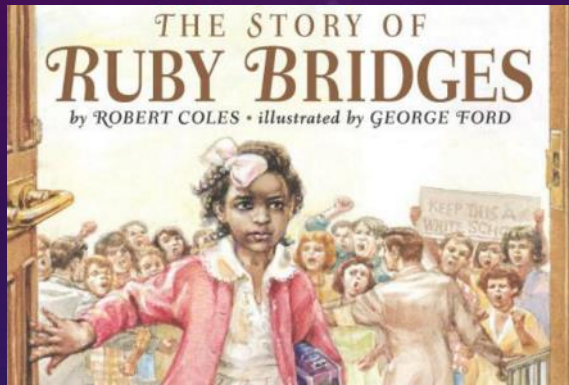
TORI

- GATHER DATA OF MULTITUDE OF CHARACTERS
- GET AVATAR CHARACTERS OF THEM ONTO THEM IN ONE SCENE WITH OFFSET ANIMATIONS
- LIVE STREAM MOCAP ACTORS INTO UNITY

SUMMARIZED CONTEXT FOR PROBLEM

- HOW DO YOU KNOW IT IS A PROBLEM?
 - WE KNOW THAT VR FOCUSES ON VIDEO GAMES, FILM, MEDICAL RESEARCH, AND TRAVEL – RESEARCH IS STILL DEVELOPING ABOUT CHILDREN, EMPATHY, OR THE STORYNESS OF IT
- WHAT MAKES IT A CHALLENGE OR OPPORTUNITY FOR YOU AS A DESIGNER?
 - AS DESIGNERS THIS ALLOWS US NOT TO JUST PLAY AROUND WITH THE TECHNOLOGIES WE KNOW, BUT RATHER PUSH THEM IN A NEW DIRECTION TO PROVIDE POSITIVE VALUES THROUGH IMMERSION
 - MOCAP CHALLENGES ME THROUGH FIGURING OUT HOW TO DIRECT THE PERFORMANCE TO MAKE THE USER FEEL SOMETHING
 - VIRTUAL REALITY CHALLENGES ME TO CONSIDER THE RANGE OF INTERACTION POSSIBLE IN VR, INCLUDING USER CONTROL, AND DETERMINE THE IMPLICATION OF THOSE INTERACTIONS IN THE CONTEXT OF THE STORY

PROJECT



PROJECT

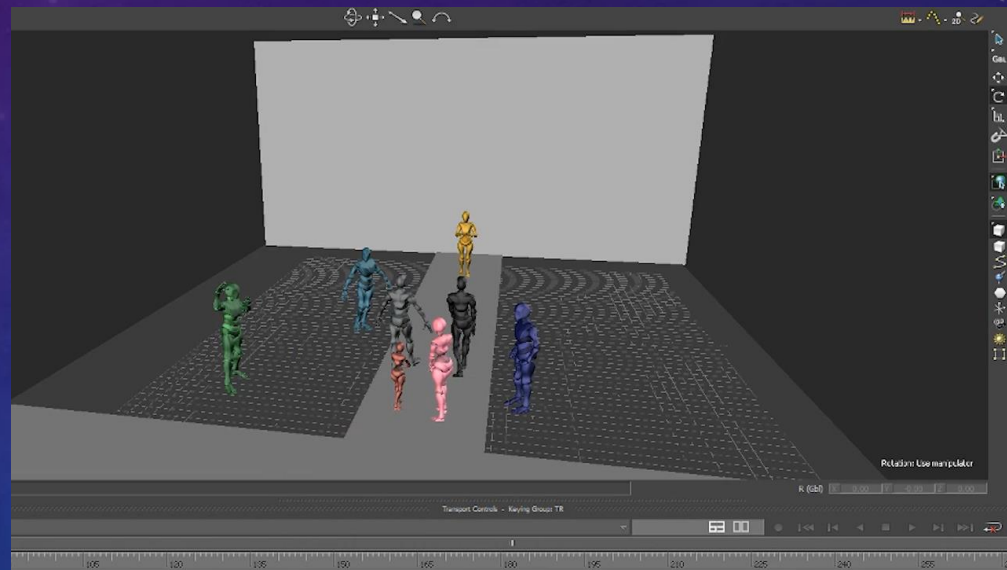
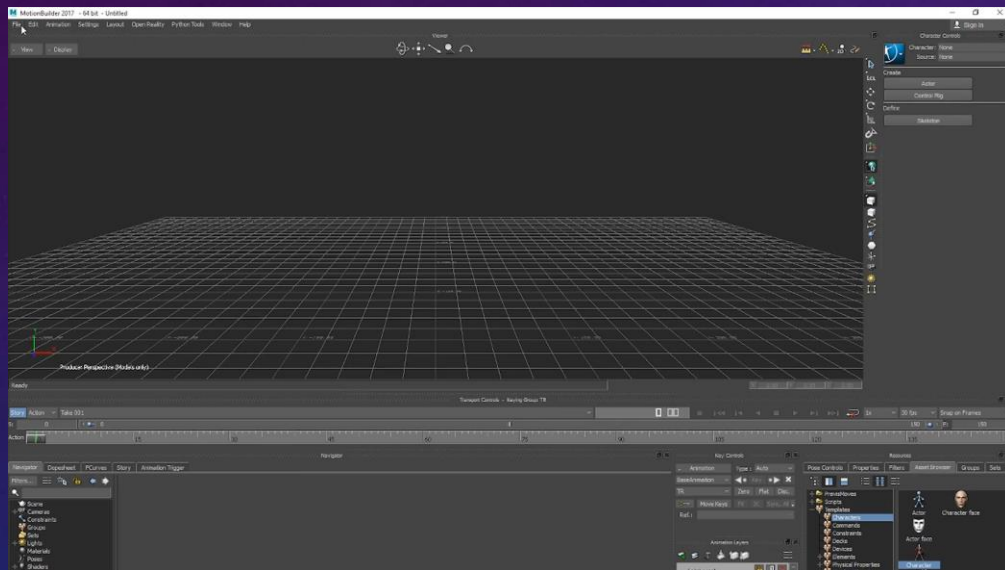
- GETTING DATA



- RUBY
- LUCILLE BRIDGES
- BARABARA HENRY
- CROWD/PICKETERS
- ESCORTS/POLICE OFFICIALS

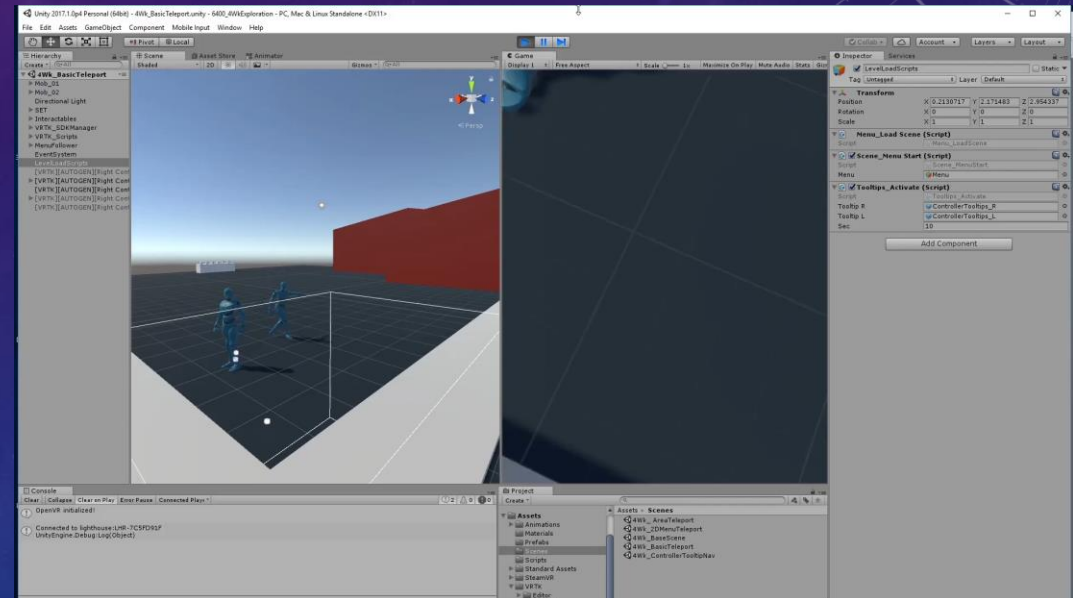
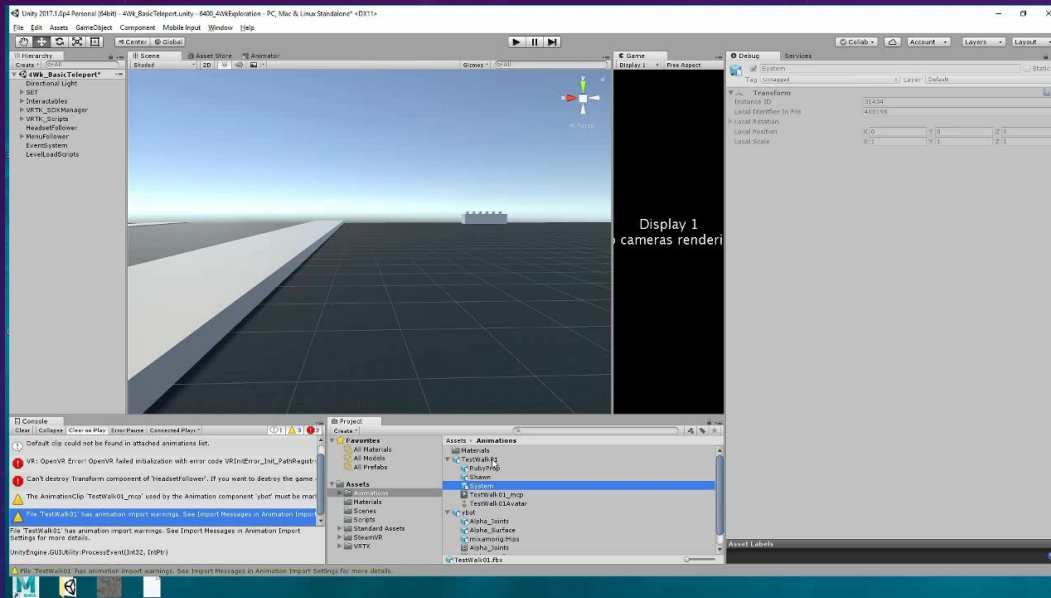
PROJECT

- BRINGING DATA INTO MOTION BUILDER TO REMAP ONTO CHARACTER
- GETTING DATA FROM ALL CHARACTERS INTO ONE SCENE RUNNING AT ONE TIME



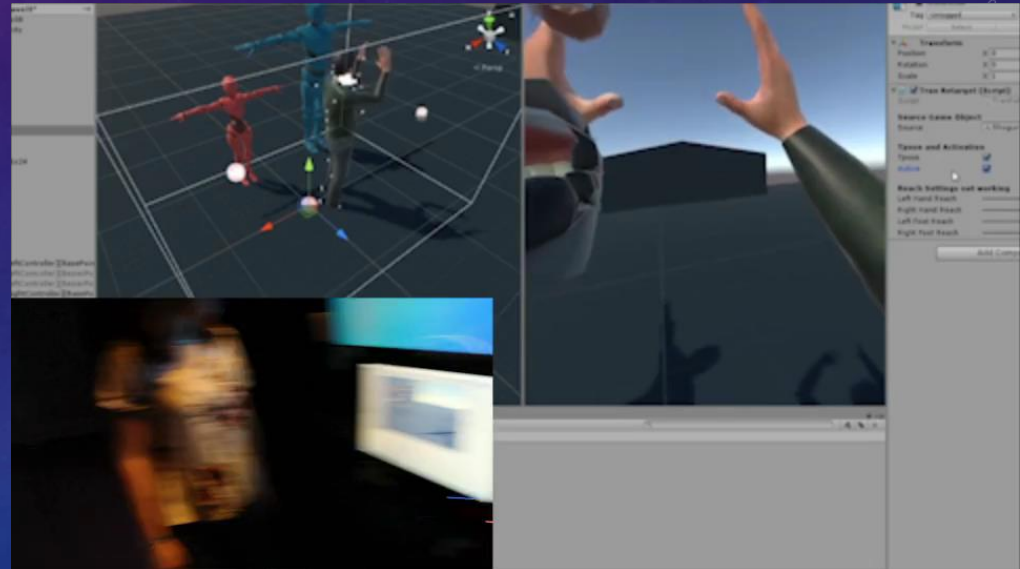
PROJECT

- BRINGING DATA INTO UNITY TO SETUP ANIMATIONS



PROJECT

- SEEING IF WE CAN LIVE STREAM A CHARACTER INTO OUR SCENE



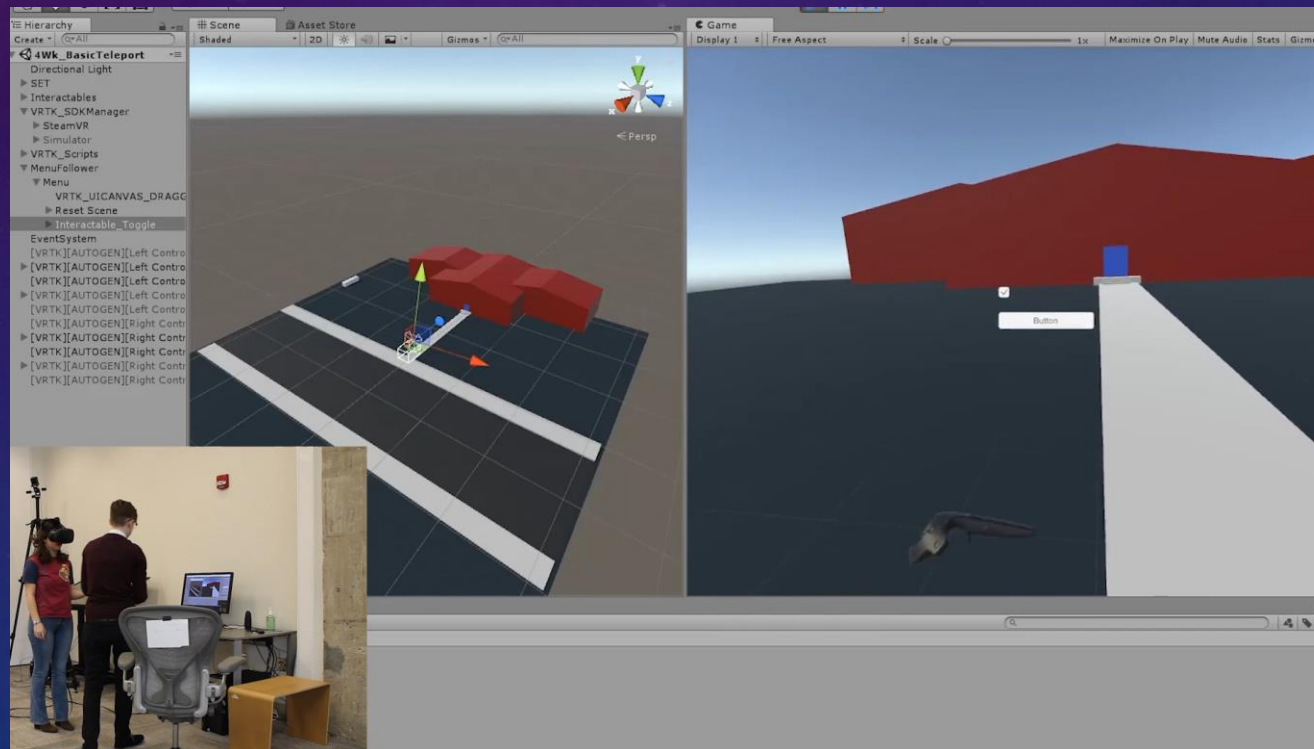
PROJECT

- NAVIGATION
 - BASIC TELEPORT
 - RADIAL MENU
 - 2D MAP
- UI/MENU
 - HEADSET MENU
 - FUNCTIONAL BUTTONS
 - USE OF TOOLTIPS
- ANIMATION CONTROLS
 - PAUSE/PLAY/RESTART

<https://www.youtube.com/watch?v=icsyQ986RS4>

PROJECT

- PLAYTESTING SCENE TO SEE WHAT MECHANICS NEED TO BE CHANGED/UPDATED/ARE USABLE



REFLECTIONS

ABBY

- CLEAR PLAN AND CONCEPT, EXPLORATION AND ADAPTATION
- CHOICE OF NAVIGATION BASED ON TESTING AND STORY CONTEXT
- BRINGING IN CONCEPT TO INFORM THESE TECH CHOICES AND DEVELOPMENT.

TORI

- CONCEPTUAL PROCESS VS. TECHNOLOGY
- GETTING A CLEAR MEANING THAT RIDES A FINE LINE WITHIN THE STORY
- GET THE USER TO FEEL SOMETHING – MAINLY GOAL BEING EMPATHY

NEXT STEPS

TORI

- GET ACTORS (AROUND 5) WHO ARE WILLING TO COME AT THE SAME TIME, AND DO ONE SCENE OF ACTION, MULTIPLE TIMES
- TRY IMPLEMENTING FACIAL DATA AND SOUND
- STREAMING THEM INTO THE UNITY SCENE FOR ACTING WITHIN THE STAGE SETTING
- GET OUR AVATAR CHARACTERS ONTO THE DATA

ABBY

- FULL PROTOTYPE SCENE: PROTESTORS, INTERACTIVE OBJECTS, NARRATIVE FRAMEWORK
- EXPERIMENT WITH LEVEL OF CONTROL: USER CONTROL VARIATION DEPENDING ON SCENARIO
- MORE DEVELOPED ENVIRONMENT. BLOCKED IN SCENE FOR SCHOOL, NEIGHBORHOOD, GENERAL PLACEMENT OF PROPS

