TalkTech 2022:
Presenting
Local Businesses or Artefacts with Virtual Reality

A Global Collaboration Project between

Politehnica University of Timisoara, Romania and Bentley University, MA, USA

Description

Digital reality (augmented and virtual reality and other immersive multimedia experiences) have brought about new forms of engagement across industries in recent years as advances in mobile technologies have raised awareness and usage of these technologies.

Bentley students in CS100 (Solving Business Problems with Information Technology) , and UPT students in TMM (Technology of Multimedia) will participate in teams of four **(2 students from each school per team)** to explore uses of virtual reality to share experiences of local culture or business.

With your international partners, you will use web-based collaboration and communication tools to meet both synchronously (in real time using voice, video, and chat) and asynchronously (via email, or messaging) to create and share artefacts of virtual reality and discuss similarities and differences after virtually"visiting" similar locations as selected by your partners.

Each team will create one shared virtual reality experience using Co-Spaces for their international partners. **Your group will share a CoSpaces account.**

You will review and critique the VR experiences that your partners created for you during a video call.

Collaboration with OpenVM

For this project you will use OpenVM, an online collaboration tool managed by UPT, to share your group's progress with each other and with your instructors. To access this account please check the email message you will receive with your login information. The course is located here -
https://hub.openvirtualmobility.eu/course/view.php?id=62

You will receive your individual OpenVM account via email!

You will use the blog feature of OpenVM to share your group's multimedia and video files, findings, progress, and reflections.

Post a summary of your conversations, text messages, on OpenVM each week as you work on the project, in the Blog of your group.

Milestones

This project has many small parts and milestones.

Week Of	What You Should be Doing
Oct 17	- Select a partner of your choice - Select a topic for your team. - Complete your profile on OpenVM so that you and your partners can connect with you by email, or some other method that you choose. **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Oct 17	- Make contact with your partners who have chosen the same topic - Set up a first meeting time when you can discuss how you will work together as a team. - How will you communicate and make decisions? - Who is responsible for which tasks?

	○ Set up accounts on file sharing, messaging or social media apps for your team. ● Figure out when (on or before the week of Nov 7) you plan to visit your location. When you visit, create 360-degree images for use in your VR Scene(s). ● Start to research your location. ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Oct 24	● Talk with your partners about your topics, ask what they would like to learn about your topic. Discuss and design your CoSpaces VR experiences. Set up the CoSpaces project and post a link to it on the OpenVM Blog. ● Begin to do research or identify your topic ● Visit your location if you haven't already. ● Start Learning Co-Spaces - Attend a Co-Spaces Workshop (Bentley) ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Oct 31	● Start Learning Co-Spaces - Attend a Co-Spaces Workshop (Bentley) ● Visit your location if you haven't already. ● Check in with your partners in an online meeting. ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Nov 7	● Visit your location in person if you haven't already. ● **Write a Blog Post.** One from each university team on what you learned about your topic / location due this week on OpenVM ● Start working on your VR Scene ● Check in with your partners in an online meeting. ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Nov 14	● Continue working on your VR Scene in Co-Spaces ● Finish up your scene. Add the "teleport" button between your scene(s) and theirs. ● Check in with your partners in an online meeting. ● **Comment.** One from each university team on the blog post

	your partners wrote last week about their topic or location. ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week.
Nov 21	● Keep working. Bentley students are off W-Th-Fr this week. ● Bentley Students: Happy Thanksgiving!
Nov 28	● Finish up your VR scene if you haven't done so already. ● View your CoSpaces story using Google CardBoard or on your screen ● Record your **Critique Video** and your **Reflection Video** with your international partners.. ● **Each university team:** Write a short (approximately 50 words) blog post on OpenVM describing your group's progress this week. ● UPT Students; Happy Great Union Day (Dec 1)!
Dec 6	● **Each person**: Write your **Reflection Blog Post** on OpenVM. ● One person from your combined team: Write the **Project Link Blog Post** containing the link on CoSPaces to your team's project. ● By **Weds. Dec 7**, all deliverables uploaded to OpenVM ● **Friday Dec 9**, Bentley students present in class ● **Monday, Dec 12**: UPT students present in class

Topics

Select one of these artefacts/places/locations of cultural interest to create a digital story in virtual reality. You will create a VR story in Co-Spaces describing what you learned about the history, importance, cultural value, activities performed there.

1. Famous house of worship
2. Famous statue
3. Famous sculpture or monument
4. Historical building in your city
5. Local small business of your team's choice (both partners choose the same type of business)
6. Famous statue
7. Famous sculpture or monument
8. Historical building in your city

a. UPT: Tram Museum
b. Suggestion: Bentley students: [Lyman Estate Greenhouse](#) is near campus
9. Interesting new/modern building in town
10. City hall or government building
11. City Main "square"
12. Town green, or city park
13. Ethnic grocery store
14. Local sports facility
15. Local coffee shop or diner (not starbucks)
16. Local museum (Bentley students: [get a pass from the library](#))
17. Local art or creative center
   a. UPT: [Faber](#) -
   b. Bentley: [Waltham Open Studios](#) Nov 5/6)

[Sign up here.](#)

Sign up for a topic you're interested in exploring with your partners. We will notify you if we change your group or topic to better balance the teams.

Research, Plan, and Blog about your Visit

Work with your partners to research about the selected topic in your own city. **You may talk to local proprietors, or read about the location online if it is historical.**

Learn how to create a 360 Image. To create a 360 image, you can borrow a 360 camera (ask your teacher) or use a 360/panoramic camera app on your phone. Check out [Spherualizer](#) , [Capture360](#), or other similar apps.   Take a few photos when you visit so you can see which came out the best. The 360 image should be clear and of good quality reflecting the topic you selected.

Write a Blog Post: Each university team creates a blog post on OpenVM with information (at least four interesting facts) that you learned about your topic/artefact/location. Include links if you have references online. Include photos or videos if you wish from your visit. Post it to OpenVM. Suggested length: 150-300 words. This needs to be done before you complete your VR Scene. (Week of Nov 7)

Comment on a Blog Post: Read the blog post that your international partners wrote and individually write a comment on it, describing what you learned, how is similar or different to your team's example. (Week of Nov 14)

CoSpaces Virtual Reality Scene Requirements

Each group will create one VR story in CoSpaces containing dialogue and information about your location. The story will contain at least two scenes, one from each university team. Team members from each school will work on their own scenes within the same CoSpaces project. Add a "teleport" button to switch between your scene and that of your international partners.

Use at least one 360-image that you created when visiting your location as part of your scene. Incorporate avatars, dialog and other elements to present at least four facts about your topic or location that you learned.

Sharing and Reflections on your Project

Project Link Blog Post: One person from your combined team posts the link to your group's combined project.

Reflection Blog Post: Each person posts a short reflection (200 words) on this project to OpenVM.
- What did you learn by developing a virtual reality scene to tell a story about your location?
- What did you learn about the culture of your international partners by completing this project?
- What similarities or differences did you notice in your scene on similar topics from different countries?
- What did you learn about Virtual reality, and how did it enhance your learning experience?

Reflection Video: With your partners, record a short video (4 minutes at most) describing what worked and didn't work for your team while creating this project. What challenges and successes did you have while working as a team?
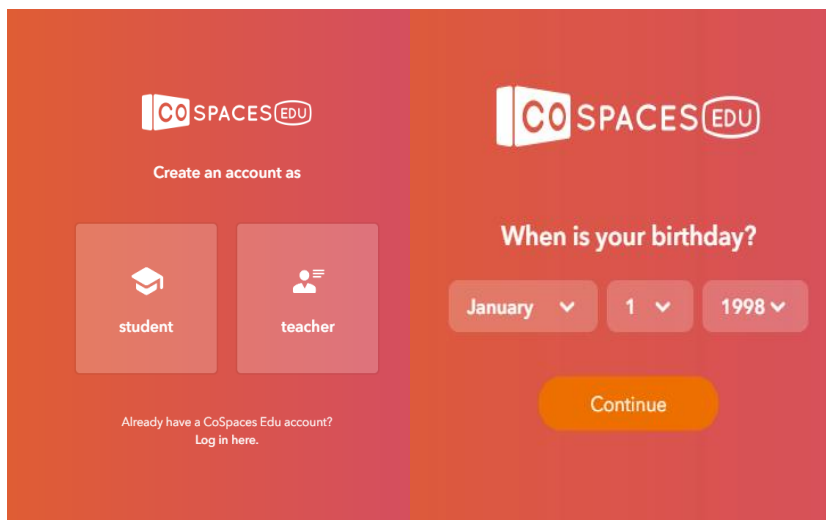
Critique Video. Record a Zoom meeting with your partners as you present and critique each other's scenes. Discuss similarities and differences, record the conversation on Zoom.Create a 3 to 5 minute video in which all team members demo, discuss and critique the VR scenes created by your partners.

Post the video on a streaming platform such as YouTube (or link from your OneDrive) and include the link in your blog post on OpenVM. Embed the video if you post it to YouTube.
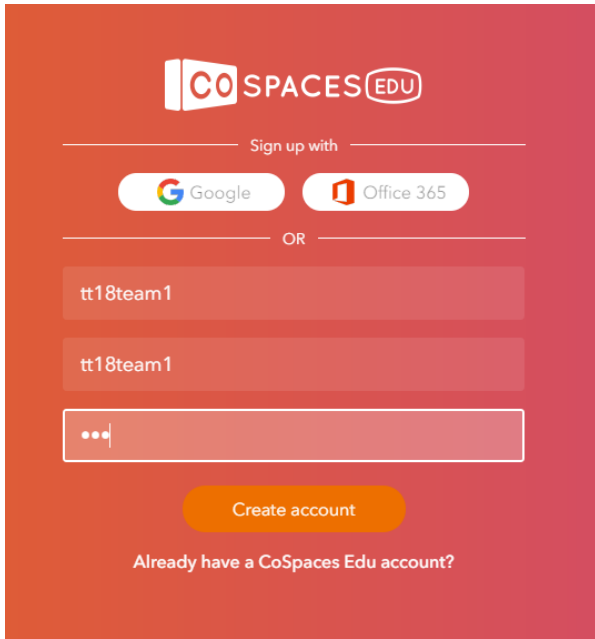
Using CoSpaces

Use CoSpaces to create your VR experience. CoSpaces enables you to animate your VR world without too much difficulty using CoBlocks, a block-based visual programming environment within CoSpaces. Since the UPT students have programming experience, they are required to do this, and can help the Bentley students to animate their VR worlds. Bentley students can ask CIS Sandbox tutors for help.

One person on your team will create an account on CoSpaces for your entire team to share. Enter the code **RGLLH** to join our class. Then enter your birthday

.

Finally, accept the terms and conditions.

Set your name and username to be *tt20teamX US / RO* (where you replace X with your team number). Select a password for your team, and share it with all members of the team so you can work together on the same VR project.

You should be ready to go!