## TalkTech 2020:

## **Virtual Reality Visits to International Businesses**

A Global Collaboration Project between Politehnica University of Timisoara, Romania and Bentley University, Waltham, MA, USA



# **Description**

Virtual reality enables new forms of engagement and experiencing the world especially when travel is impossible due to the current pandemic.

Bentley students in IT 101, introduction to information technology, and UPT students in TMM (Technology of Multimedia) will participate in groups of four (2 students from each school) as members of international teams create a VR scene while learning about a large international company.

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 virtual reality scenes, and then determine best use cases for these technologies.

Each team will create one shared virtual reality experience with their international partners. In a video call at the end of the project, you will review and critique the VR experiences that your group created.

For this project you will use <u>OpenVM</u>, an online collaboration tool managed by UPT, to share your group's progress with each other and with your instructors. To access this

Your group also will create a blog on OpenVM to share your group's multimedia and research. Each member of your group should contribute to this.

Please upload the video files that you create to OpenVM in addition to OpenVM.

## 1 - Select a Topic

Select one of these companies to learn more about:

- 1. Adobe
- 2. Amazon
- 3. Apple
- 4. CISCO
- 5. Facebook
- 6. Google
- 7. IBM
- 8. Instagram
- 9. Intel
- 10. LinkedIn
- 11. Microsoft
- 12. Netflix
- 13. Nokia
- 14. Samsung
- 15. SAP
- 16. Twitter
- 17. Uber

## **Deliverable: (Due by October 9)**

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

# 2 - Use Open VM and Connect with your Partners

We will use OpenVM, an open virtual mobility application hosted in Romania, to manage the project. The link for our project on OpenVM is

https://hub.openvirtualmobility.eu/course/view.php?id=60

Complete your profile on OpenVM so that you and your partners can connect with you by email, or some other method that you choose.

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. Many Bentley students use GroupMe, for group work.

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

#### **Deliverables:**

- Create your own account and profile on Open VM. (Due by October 15).
- Reach out to your team to setup a first meeting. (Due by October 15)
- Set up your first meeting during the week of October 19, if not before.

Use OpenVM to document your team's process and the blog page to post your work

# 3 - Create a virtual visit to your company's US and RO main headquarters

Work with your partners to create a virtual visit to your company's US and RO main headquarters using Google Earth and Google Maps (Street View).

#### Multimedia:

• Create a Google Street View 360 image showing your location. Follow these instructions to create a 360 degree image from Google Street View.

- Include a short 3-5 second "fly-over" video from Google Earth (use PowerPoint's insert screen recording feature or screencast-o-matic.com to create this video).
- Capture any other still photos that would be helpful in sharing on your virtual visit.

Research the business applications and operations at each facility with at least six facts, and some comparisons.

Each person in the group should focus on a different product or aspect of the company (history, products, services, etc.)

Include photos or videos if that will help you tell your story. You can write in the OpenVM blog post created for each team.

Then 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.

Be sure to include references to any articles or online sources you used.

#### **Deliverables:**

- Blog post due by Nov 1.
- Blog comments due by Nov 8

## 4 - Virtual Reality

With your international partners, use CoSpaces.io to create two original VR scenes showing your company's headquarters in each country along with a "teleport" feature to switch between them when you click on some object placed in each scene.

Use the information from your blog posts above to create a digital story that you can tell about your company. Each scene should feature a dialogue between different people (it could be imaginary characters, or the company's CEO, or other "real people") describing what you learned about the company, their services and operations. Be as creative as you wish.

#### **Deliverables:**

#### By November 1:

 Meet with your groups to discuss and design your CoSpaces VR experiences. Set up the CoSpaces project and post a link to it on the OpenVM Blog.

#### By November 15:

- Finish your combined VR experience in CoSpaces, and be sure to add
  - O animations, avatars, signs, or dialogue
  - O a "Jump" button to switch between scenes created by each team
  - O Watch this video for a quick tutorial on how to switch scenes in CoSpaces. <a href="https://youtu.be/8dMNt9tLon8">https://youtu.be/8dMNt9tLon8</a>
- Share with your partners, watch it in VR using Google CardBoard or on your screen

#### By November 30:

- Create a 30 second screen video showing the two scenes and the switching from one to another. Embed it in a blog post, in your team blog, on the Open VM Blog. Please insert also the link, if you publish it on YouTube or use embeded frame.
- Create another 2 to 3 minute video in which all four team members discuss and critique the VR scenes created by your partners. Post the video to in a blog post on OpenVM. Embed it in a blog post, in your team blog, on the Open VM Blog. Please insert also the link, if you publish it on YouTube or use embedded frame.
- Write a short review of the VR scene your partners created, describing similarities, differences, and lessons learned.

## 5 - Reflections

## **Group Reflection (Due by Dec 7)**

Record a short video (4 minutes at most) with your group 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? Post it to the OpenVM Blog.

## **Individual Reflection (Due by Dec 7)**

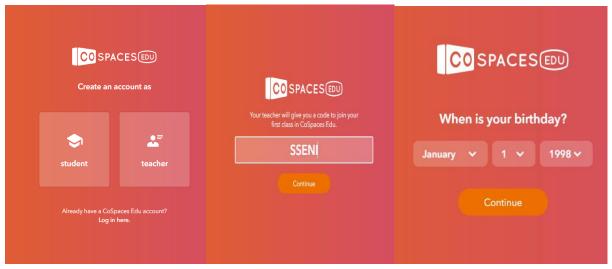
Each person: write a blog post (about 250 words) on OpenVM describing your experience on this project.

- What did you learn about Virtual Reality?
- What did you learn about the culture of your international partner?
- For conveying what type of information or content is VR most suitable?
- What you learned from watching the VR experience.
- How does VR add to your learning experience?

# **Using CoSpaces**

Use <u>CoSpaces</u> to create your VR experience. Watch the first three minutes of <u>this video</u> for a quick introduction. 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.

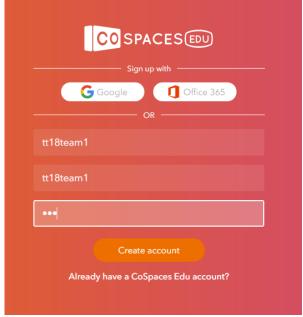
One person on your team will create an account on CoSpaces for your entire team to share. Enter the code **9Q855** to join our class. Then enter your birthday.



Finally, accept the terms and conditions.

Set your name and username to be **tt20teamX** (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.



The projects should be stored in <a href="https://edu.cospaces.io/Studio/Class/9q8s5/Assignments">https://edu.cospaces.io/Studio/Class/9q8s5/Assignments</a> .

Watch this video for a quick tutorial on how to switch scenes in CoSpaces. <a href="https://youtu.be/8dMNt9tLon8">https://youtu.be/8dMNt9tLon8</a>

## In Class Presentations.

We will discuss your work on the project on December 9 in class.

# **Grading**

Post the final versions of all of your work files on OpenVM so we have them. Share transcripts of your chats, email messages, or other communication as evidence of your collaborative efforts. We will grade each component of your work.

Work will be graded based on your blog post, complexity and quality of your VR scene, and your reflection on this project.

# **Holidays:**

Nov 25-27 Bentley Thanksgiving Holiday Nov 30 - Dec 1 - National Day in Romania