TalkTech 2021: Presenting Creative Industries 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 IT 101, introduction to information technology, and UPT students in TMM (Technology of Multimedia) will participate in groups of six (3 students from each school) as members of international teams to explore uses of AR and VR as related to sharing cultural experiences.

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 artifacts of virtual reality, and then determine best use cases for these technologies and industries.

Each team will create one shared virtual reality experience for their international partners. You will review and critique the VR experiences that your partners created for you during a video call.

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 account please check the email message you will receive with your login information. The course is located here -

Your group also will create a <u>blog</u> 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. These videos can be found here: (2) TalkTech Project - YouTube.

Select and research a company based in your country associated with the industry your group chooses. Create a VR scene describing some of your research of the company's products, services and innovation in your country, and provide a "jump" button between the two scenes.

1 - Select a Topic

Select one of these industries companies to study applications of virtual reality.

- 1. Mobile Telecommunications
- 2. Marketing/ Advertising
- 3. Travel / Tourism
- 4. Automotive / Vehicles
- 5. Design, fashion and textiles
- 6. Sports / e-Sports
- 7. Consumer Electronics
- 8. Digital Media / Streaming Services
- 9. Digital Media/ TV, Video or Film
- 10. Health Care
- 11. Technology / Web, Cloud or Internet
- 12. Computer Gaming
- 13. Software / Electronic Publishing
- 14. Online Education / Learning and Training
- 15. Social Media

Deliverable: (Due by October 17)

Sign up online 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.

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=61

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

Deliverables:

Check your own account and profile on Open VM. (Due by October 20).

- Reach out to your team to setup a first meeting. (Due by October 24.)
- Set up your first meeting for the week of October 18.

Use OpenVM to document your team's process and the <u>blog</u> page to post your work

3 - Research innovation, services or technology for the company/industry

Work with your partners to research innovative business uses, technology innovation, or a great alumni or person in the industry you selected above, preferably one happening in your own country. Teams from each school will each write one blog post of approx 250 - 300 words describing what you learned, facts including references. 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 <u>blog</u> 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:

- <u>Blog</u> post due by Nov 1.
- Blog comments due by Nov 8

Deliverables:

Together:

• Create a VR background that describes the company. It could be:

- 360 photo of your choice which describes the industry and company, you can use a corp hq from Google Maps in US or Romania (use Street View)
- A person engaged in a product or service of the company
- Your idea and mix of images or "fly over" videos
- Cospaces scene where switch between the two images
- Research about the products and services the industry has specific within your country
- Discuss what's similar or different

Individually:

• Select one product or service that the company provides (or a recent acquisition)

Create a dialog between two or more avatars sharing at least four significant facts about a recent innovation, product or service from this industry/company. The information and questions should be real (please provide references to your sources). The avatars should be based on real people (specific or general) ...for example, you could have a conversation between Tim Cook and a reporter talking about a recent innovation or how the iphone was built at Apple) - or you might show a college student interviewing for an internship at the company). Use your imagination!

4 - Virtual Reality

With your international partners, create two original VR scenes showing examples of how VR might be used in your industry of study. (Team members from each school will work on their own scenes within the same CoSpaces project, and add a "jump" button to each scene that will load the other.)

You can create a 360 image from Google Street View by following these instructions. <u>https://svd360.istreetview.com/</u> (More to come) Here's another video describing how to do this: <u>https://youtu.be/cLltJdfGtO8</u>

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 <u>Blog</u>.

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

 Share with your partners, watch it in VR using Google CardBoard or on your screen

By December 1:

- 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 to in a <u>blog</u> post on OpenVM. Embed it in a <u>blog</u> post, in your team <u>blog</u>, on the Open VM <u>Blog</u>. 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.

6 - Reflections

Group Reflection (Due by Dec 5)

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 5)

Each person: write a <u>blog</u> post (about 100 words) on OpenVM describing your experience on this project.

- What did you learn?
- 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?

Deliverables

- 1 single VR scene in Co-Space with dialog and information showing 360 images done for both countries and a button to switch between them 2 scenes in total, one from RO and one from US
- 1 blog post per university team (2 blog posts per group) with the facts, information and references you identified (OpenVM) - 150-300 words, with links
- 1 video critique of your group's project and how it worked all students in group discussion for 3-4 minutes.
- 1 blog post (100 words) with your personal reflection on this project
- 1 blog post with the LINK to your group's COSpaces combined project

Using CoSpaces

Use <u>CoSpaces</u> to create your VR experience. Watch the first three minutes of Play Video

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 to join our class. Then enter your birthday.

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Create an a	account as E teacher	Your teacher will give you a code to join your first class in CoSpaces Edu.	When i January ∽	s your birtl 1 v	hday? 1998 ~
Already have a CoSj Log in				Continue	

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.

Sign up with	
Google (] O	fice 365
OR	
tt18team1	
tt18team1	
•••	

In Class Presentations on Monday Dec 6.

We will discuss your work on the project on December 7 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.

Rubric to follow.

TIMELINE

- Week of Oct 11 sign up for groups
- Week of Oct 18 first contact and discuss background images
- Week of Oct 25 divide up the topics about the company and research
- Week of Nov 1 create cospaces with two bg images and switch between, add avatars and dialog
- Week of Nov 8 write blog posts and finish up the VR scene
- Week of Nov 15 critique and sharing with partners
- Week of Nov 22 Thanksgiving in USA
- December 1 and November 30 Holiday and National Day in Romania
- Dec 6 Project is Due (Individual reflection) and presented in class

Holidays:

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