

Meta Spark AR: Student AR Project Overview

OVERVIEW & PURPOSE

Students in the Meta Spark AR course have an opportunity to design and build their own Augmented Reality Experience. This is a great way to showcase and be proud of what you have learned in the course. This assignment is designed to help you understand the context and use of AR in your area of interest. The project will enhance your skills in project management, communication, AR design, and Meta Spark AR.

For the project, you will team up or take an independent path to building your own, unique AR Experience. We invite all students to showcase their project to others for a chance to win a MetaQuest 2 Headset and more. Student stipends of \$500 are available to students who complete the course successfully by completing all weekly lessons and an AR project for the showcase.

Timeline

- Week 5 | 11/2: Build Teams & Brainstorm Project Idea
- Week 6 | 11/9: Finalize Project Plan & Check-in with Faculty Mentor
- Week 7 | 11/16: Work on Project (gather assets)
- Break | 11/23: Fall Break
- Week 8 | 11/30: MVP Due @ Student Showcase Event (2:30 pm 5:00 pm). Virtual options for students participating online are also available.

Instructions



1. Determine if you will Work on a Team or Independently

Both options are available for this AR Project. If you are really passionate about a topic and want to work alone - fantastic! If you would like to partner up with another student (s) to leverage the talent or meet new people – that is great too! But you have to choose one or the other by Week 6.

2. Brainstorm an AR Project Idea to Discuss with a Faculty Mentor by Week 6 (11/9)

Consider all the interactions, tracking tools, and features that you have learned about thus far. Use those lessons to help design an AR Experience that meets a community or business need. We've set up a couple of examples for inspiration on the next page. By Week 6, we'll pair you up with a faculty mentor to connect with and discuss your project idea. They will help you refine the project plan and map out your path to building it out by 11/30.

3. Draft a Brief AR Project Plan

There will be a project plan template posted in D2L for you or your team to complete. This will organize the project details into a single, easy-to-read overview of your project. This document will help you complete your project on time and will be submitted with your final project.

4. Work on Your Project!

A Project Timeline Template has been crafted for you to follow and customize for your project. We will have time during the scheduled class periods for you to work on your project.

5. Present Your AR Experience at the Student Showcase

Show off your hard work! Reflect on your experience and share your feedback for students in the next group. You only need an MVP for the showcase, but if you want to go further you can have till 12/31 to complete all of your assignments required for the Meta Spark AR \$500 stipend

Criteria

Must have a Minimal Viable Product (MVP) completed by and presented by November 30th The project should also include an AR experience that meets a defined need and a project plan

Meta Spark AR Student Showcase Format:

GameJam (Modified)

What is a Game Jam?

Game Jams, also known as, hackathons are opportunities for like-minded developers to create programs based on a specific scenario. Developers can work independently or in teams. These developers will be scored by judges to see who can create the most effective, working program with minimal errors and bugs. The day of the game jam presentations will be November 30th, 2023 at 2:30 pm and students will begin creating their effects on November 16th, 2023 once they clear it with a faculty mentor.

What is the Scenario for Meta Spark AR Game Jam?

The scenario is "Local Businesses or college department", students in the AR class are asked to designed around a scenario listed here, or another that you are passionate about. These scenarios give you structure if you need help considering what to do out to local RRCC departments and communicate with them on creating an AR program or effect that will reach their student's needs. Students who would rather not create a program for a local business can select from a pool of pseudo businesses, below is a list of those businesses:

ACTIVE RRCC Program Scenario Examples

- RRCC Early Childhood Education Program This program wants to leverage AR to help ECE teachers role play "challenging" experiences with a child, teacher, or staff member that they have to interact with. Face Overlays, 3D Models and Beacons for the classroom could be options.
- 2. RRCC LGBTQ + Multicultural Center This department want to help students and community members get information that would make them feel invited and comfortable in the space. Could include an interactive tour of the LGBTQ+ and Multicultural Centers, as well as the ability to respond to basic questions community members may have (Why are pronouns important? How do I use them properly? What do each of the flags mean? etc.). I would hope it would be an invitation and raise comfort for folx to visit the centers, as well as a way for people to get basic information with a personal touch without visiting our spaces if they are uncomfortable doing so.
- 3. RRCC Astronomy Program Create a Classroom Planetarium tool to allow students to study the night sky, including constellations, deep sky objects, planets, and other interesting astronomical objects or events. Including mythology of the constellations associated with various cultures would add value and interest. The freeware planetarium software, Stellarium, would provide a great starting point for development.

Psuedo Business Scenario Examples

- 1. **Autism Awareness Non-Profit –** This organization is looking for a way to create a product that can benefit families or caretakers of individuals with Autism.
- 2. **Children's Fun Park –** This local park wants to create an effect for kids to use that enriches problem-solving, team building, and communication.
- 3. **Paul's Flower Shop –** This business wants to create labels for their plants, the labels need to display not only the name but also a care sheet of all 30 plants.
- 4. **Dan's Martial Arts Dojo –** This gym would like to create its own martial arts team, they need a logo to put on their gi and they also would like their gi to display all 10 members of the team's names when viewed from goggles or cameras.
- 5. **Local 330 Painter's Union –** This union would like for a developer to create a logo and when the logo. This logo will be placed on jobs that they did, when the logo is scanned by a Union painter it will tell them the exact color code used to paint their job.

How Will Contestants Be Judged?

There will be 3 categories judges will consider when scoring contestants. These categories are innovation, quality, and completeness. These 3 categories will be rated on a scale of 1 to 10. Judges will ask questions for each category as follows:

Innovation

- **(5 pts)** Did the developer solve a problem with their program?
- (5 pts) When you saw the developer's program did you think to yourself "what a great idea!"
- (1 pt) Does the developer know what industry they are creating their program for?

Quality

- (5 pts) Does the program work as intended by the developer?
- **(5 pts)** Does the developer have a project proposal to share with judges?
- (1 pt) Is the developer proud of what they created?

Completeness

- (5 pts) Did the developer provide a working program that is free of bugs or error messages?
- **(5 pts)** Does the program and the project proposal mesh well? (Is this the program that project proposal says will be made)
- (8 pts) Has the effect/program been made live and available for other Meta users to enjoy?