**Meeting Minutes: 10/08 – SER401 Sponsor Meeting**

**Project:** Group 35 – Psyche AR/WebXR for Public Engagement  
**Sponsor:** Cassie Bowman (ASU/NASA Psyche Mission)  
**Date/Time:** 10/08/2025 – 03:30 PM (Met for 25 minutes via zoom)  
**Location:** Zoom  
**Note Taker:** Mitchell Allen

**Attendees**

* Brayden, Bryce, Alex, Mitchell
* Cassie Bowman

**Agenda**

1. Introductions
2. Demo
   1. Metal Activity
   2. Asteroid game
3. Future plans for games
4. Sponsor Feedback
5. Next Steps

**Discussion Questions**

1. How many activities do you believe would be best for this project?
2. Are there any specific parts/aspects of the asteroid you would like us to make a module for? Any direction you would like us to take?
3. Clarification on how they would like it hosted?
4. How key is augmented reality to the goals of the project?

**Discussion Notes**

**Demos**

* Asteroid metal activity
  + Emphasise that we can't bring things back
  + Asteroid contains about 30% metal
  + Add disclaimers that we can not bring the asteroid back
  + Throw in some fun quantification for the amount
  + Make it so 65% is the highest percent
  + Add in some fun facts about how we know the metal density
* **Important not to reinforce misconceptions with our content**
* Asteroid dodge game
  + We won’t be dodging asteroids
  + Could change to meteorites or other debris
  + Go off of the NASA game guidelines to make sure we meet their specs

**Q&A**

* Hosting
  + Contact suryansh about hosting they will have details on how they want it done
* Slingshot golf idea
  + Test with regular people
  + It can be frustrating with the physics engine
  + Make sure that the average person can use it
* Another idea from sponsor: Something that helps people understand its relation to the sun and seasons
  + 95% obliquities
  + Rotates like a rotisserie chicken
  + Earth seasons game
  + Try to show users how this would effect/is different from earth
  + Show temperature change over time
* Sponsor technical ideas/guidance
  + Try to look around and use distances to place things around the user
  + We can also add animations or visualisation
  + We can use eyes on asteroids NASA to get an idea where asteroids are
  + Check NASA API’s and the Horizons database for data
* Check psyches research papers
  + Technical documents (linked in SLACK)
* Do we 100% need augmented reality
  + Was the initial idea but not married to it
* 3D models
  + Download from the models website
  + 7 spots for QR codes
  + People will use their phones like orbiters and collect experiences
* Good idea with changing the color of the asteroid through AR

**Action Items - to be completed by next meeting**

* Everyone - review web-based game guidelines: [Psyche Web-Based Games Guidelines - Platinum Class.docx](https://docs.google.com/document/d/1FpJj8QsxTBydz-wQlijcP2mJThMukpzT/edit?rtpof=true&tab=t.0)
* Everyone - brainstorm a way to involve the Psyche Asteroid’s seasons in a game/activity and review this resource. [Psyche Asteroid Rotation Animation](https://psyche.ssl.berkeley.edu/gallery/psyche-asteroid-rotation-animation/)
* Alex and Mitchell - Add a disclaimer to metal activity to make it obviously for fun and not confusing for participants.
* John and Brayden - Decide what graphics to use based on the game guidelines, make sure it does not potentially confuse participants on what the Psyche mission is doing.
* Bryce - Use the technical resources given by Cassie Bowman to find out how our activities will be hosted.

**Next Meeting**

**Date/Time:** 10/22/25