

BURGS Weekly Presentation

Broadening Undergraduate Research Groups

10/3/2025

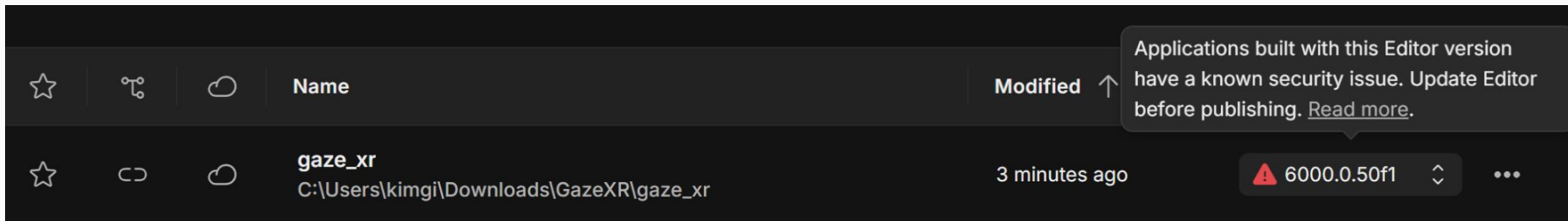
Allie, Casie, Gayatri, Kim



Weekly Progress

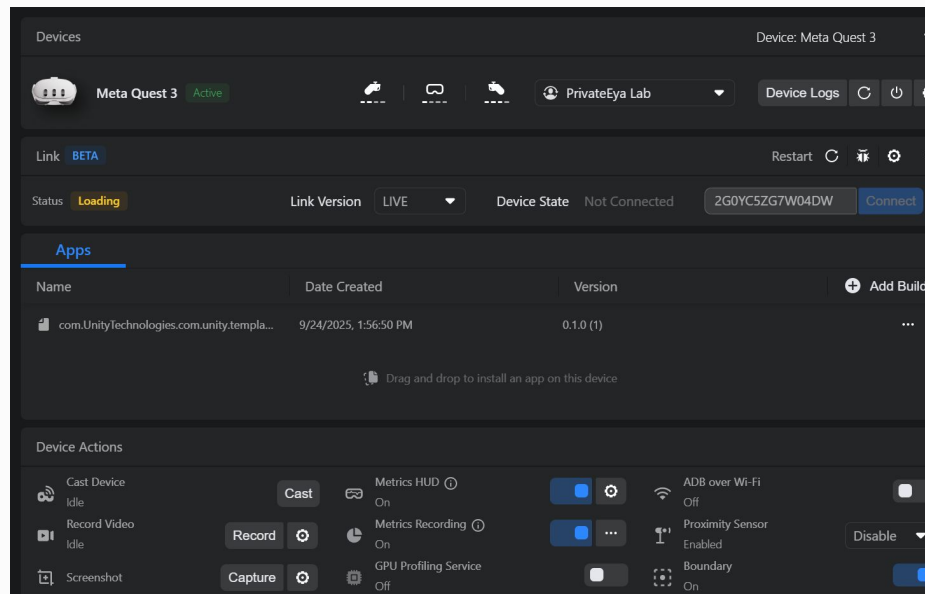
- Got a MetaQuest Pro to connect to the PC
 - Built and ran our test game successfully
 - Will need to update our editor version
- Completed game design/overview
- Researched RayInteractions within the MetaSDK

[Ray Interactions Guide](#) - Kim
[Game design Document](#) -Kim
and Casie



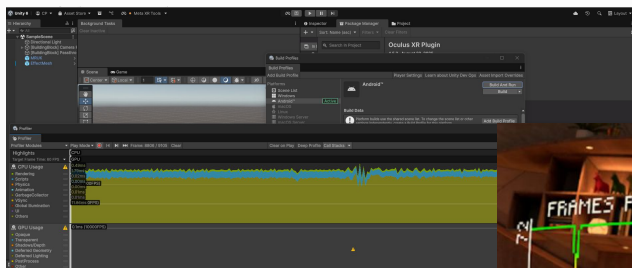
Headset-Laptop Compatibility

1. Figured out how to connect the headset with our laptops
 - a. Airlink not operational - requires a certain GPU that is uncommon in laptops
 - b. Had to work out some developer settings on headset + local device
2. Some profilers require USB-C connection
 - a. Gives us on-the-go operability with our profilers + scanning application



Whirlwind of Data Collection

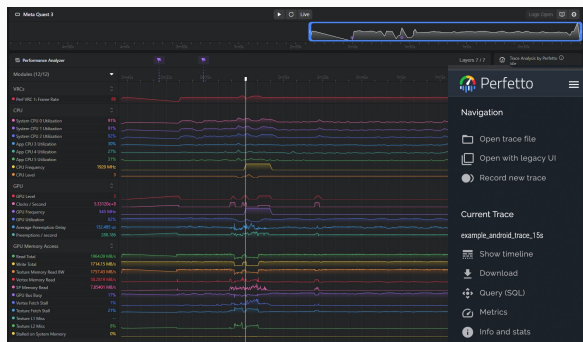
1. Unity Built-in Profiler
2. Meta Performance Analyzer
3. Perfetto
4. OVRMetrics Tool



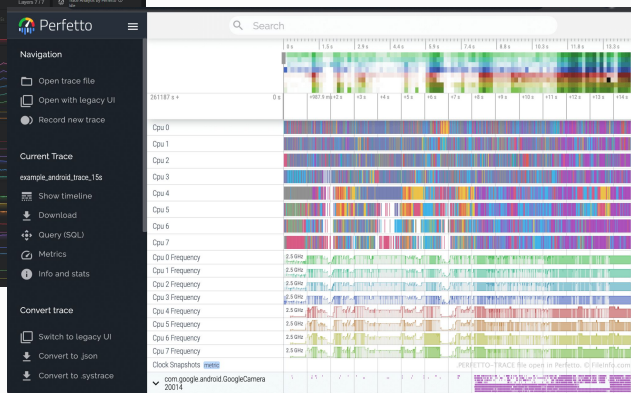
Unity Built-In Profiler



OVR Metrics



Meta Performance Analyzer



Perfetto

Whirlwind of Data Collection

Profiler	Issues
Unity Built-In Profiler	Exports in binary data
Meta Performance Analyzer	Does not export at all unless running a 3rd parallel program like Perfetto
Perfetto	Lots of logistics, tracks a lot of features we are unfamiliar with and therefore don't know if they'd be relevant
OVR Metrics	Exports a lot of data by CSV and the one we decided on for data collection (for now). At times unreliable, provides little control over when data collections starts and stops

OVR Metrics

- One of the problems with the tool seems to be its incompatibility with apps from unknown sources (unpublished Unity exports)
 - Very consistent with data collection for apps that exist on the Meta Quest Store
- Maybe instead of switching power profilers, we should switch scanners
- Next steps: Want to try the environment scanner sent by Dr. David-John and see if this yields better results



Questions?

We may have answers!

Questions/Issues