

Exploration of Virtual Reality Using Deferred Immediate Mode

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Goals

Our goal was to find a system that provides a modern, fast, and practical approach to virtual reality development. Specifically, we needed a framework which achieved the following goals:

- Performant** VR requires at least 90 frames per second to run smoothly. Low frame rates can cause users to experience headaches and nausea faster than when at high frame rates [1]. This requires VR programs to be highly optimized and multi-threadable.
- Natural** VR enables new user interfaces where components are organized within a 3D space. We wanted such components to be first class.
- Flexible** We need a general purpose user interface toolkit designed specifically for VR.
- Modular** We need a toolkit which does not include unnecessary features, but is extensible with modular components.

Deferred Immediate Mode

Lipsum

Flight

Final Project

References

[1] *The Importance of Frame Rates*. URL: <https://help.irisvr.com/hc/en-us/articles/215884547-The-Importance-of-Frame-Rates>.

More Information

Project	github.com/CSM-Dream-Team/final-project
Flight	github.com/flight-rs/flight