



# UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI YA PRETORIA

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Denkleiers • Leading Minds • Dikgopolo tša Dihlalefi

DEPARTMENT OF COMPUTER SCIENCE

WHOOSH DIVISION

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## OcuViz - EpiUse Labs

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## 0.1 Vision

The vision of this project is to enable everyday people to use the power of virtual reality to grasp a sense of scale in manners that have usually been misunderstood. This would allow easy and feasible comparisons, compared to their real-world counterparts.

## 0.2 Project Scope

A user can select a scenario they would like to visualise using Oculus Rift. Users can also specify their desired scene using inputs which will be generated and rendered for the user after objects are collected from a cloud store.

## **0.3 Architectural Requirements**

### **0.3.1 Access and integration requirements**

### **0.3.2 Quality requirements**

#### **Flexibility**

#### **Maintainability**

- The system should be modular and allow easy updating and fixing in the future.

#### **Scalability**

- All major platforms should be catered for in support.

#### **Performance requirements**

- Consistent and high frame rate (75 or more fps)
- Low latency between input and display

#### **Reliability**

- The system should be able to handle user input without crashing.

#### **Security**

#### **Auditability**

#### **Testability**

#### **Usability**

- The system must have a simple and easy to use interface
- The system should not require training before use
- Designing scenarios should be simple

**Integrability**

**Deployability**

### **0.3.3 Architectural responsibilities**

### **0.3.4 Architecture constraints**

## **0.4 Architecture design?**

Is this needed?? Subsections include: architectural tactics, architectural components addressing architectural responsibilities, infrastructure, concepts and constraints for application components

## 0.5 Initial Design