

GOALS AND REQUIREMENTS

IPFW SENIOR DESIGN TEAM 5
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Revision History

Date	Version	Description	Name
09/01/2016	1.0	First draft	Daniel Johnson
11/9/2016	2.0	Revised for Research App	Daniel Johnson

The overarching goal of this project is to obtain a comprehensive view of VR technology and tools, and explore development techniques.

- Survey available VR applications/experiences, collecting relevant data.
- Gain knowledge and experience using Oculus and Android SDK packages.
- Organize data in a relational database and design access tools to perform queries.
- Apply learned concepts of Human Computer Interaction to a simple data-entry application.
- Adhere to industry standards for relational database design.
- Deploy and test applications on Gear VR platform, using Oculus Utilities and Unity Engine.
- Design and implement a fully-featured VR experience.

Requirements to show the realization these goals are as follows:

- Create survey artifacts and collect data in central repository for analysis (database).
- Exhibit proficiency debugging and deploying Unity Applications.
- Desktop application for research data entry should meet the following requirements:
 - Windows platform (Dot NET 4.5)
 - Storage of data in a local database file.
 - Intuitive data entry and display on a per-application basis.
 - Flexible search feature.
- Deploy a scene to the Samsung Gear VR platform with the following key properties:
 - Controls and mechanics that ensure user comfort (no motion sickness).
 - Creative use of available mechanics that utilize strengths and consider weaknesses of the target VR platform.
 - Maintain smooth head-tracking throughout entire experience.
 - Eliminate technical glitches that could break immersion.