Project Vision

# Title: WoodShop

# Team

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| --- | --- | --- | --- |
| Name | Degree | Primary Role | Secondary Role |
| Cody Morgan | RTIS | Graphics Programmer | Producer |
| Minsu Kang | RTIS | Graphics Programmer | Tech Lead |
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# Project Duration

* Semester 1
  + Get hardware from lab TA
  + Demonstrate the unity – HTC vive connection
    - Unity plugins and VR libraries
  + Establish 3d object manipulation
  + Woodworking tool development
    - Miter saw (dividing a mesh into 2 sections)
    - Drill press (creating holes in mesh)
    - Plane (Shape mesh)
    - Dremel (fine shape mesh)
    - Glue (bonding meshes)
    - Lathe (circular wood shaping)
    - Paint (color mesh)
  + Shaders and effects
    - Wood texture and model
    - Other 3d models
    - Maya-unity pipeline
    - Particles
* Semester 2
  + Support exporting model as a 3d object
  + Menus
  + Serialization
  + Tools that didn’t get to in first semester
  + Further graphics effects

This project is currently planned as a 2 semester project. The first semester is intended for actual development of core tech. The second semester is intended to be for polish and further focus on graphics effects.

# Overview

The Woodshop is a combination between a tool and a simulation. IT is not intended to be a game; it is a wood carving simulation that can be used to output 3d models. While there are certainly better and more efficient tools for 3d model manipulation – none of them give you the real-world limitations of working with actual materials. Session length is intended to be between 30min-1hour. Users will start with a block of wood and various tools for changing it. Users can cut and shape it until they are happy – then export it as a 3d model to use in a game engine etc.

# Genre / Subject

Tool / simulation

# Target Users

Teens and adults

# Platform

HTC Vive

Users

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# Inspiration

* Working with wood in real life
* VR is cool

# Core Loop

* Get wood
* Change shape
* Create a thing
* Export thing as a 3d model
* There isn’t really a concept of pacing as it’s more of a tool than a game.

# Mockups

