

Assignment 4 + 5 Presentation

INFR 3380U: Industrial Design for Game Hardware

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Agenda

- Hardware Design Updates
- Virtual Prototype
- Paper Prototype
- Final Plans

Hardware Design Updates

Changes Since Assignment 2 + 3

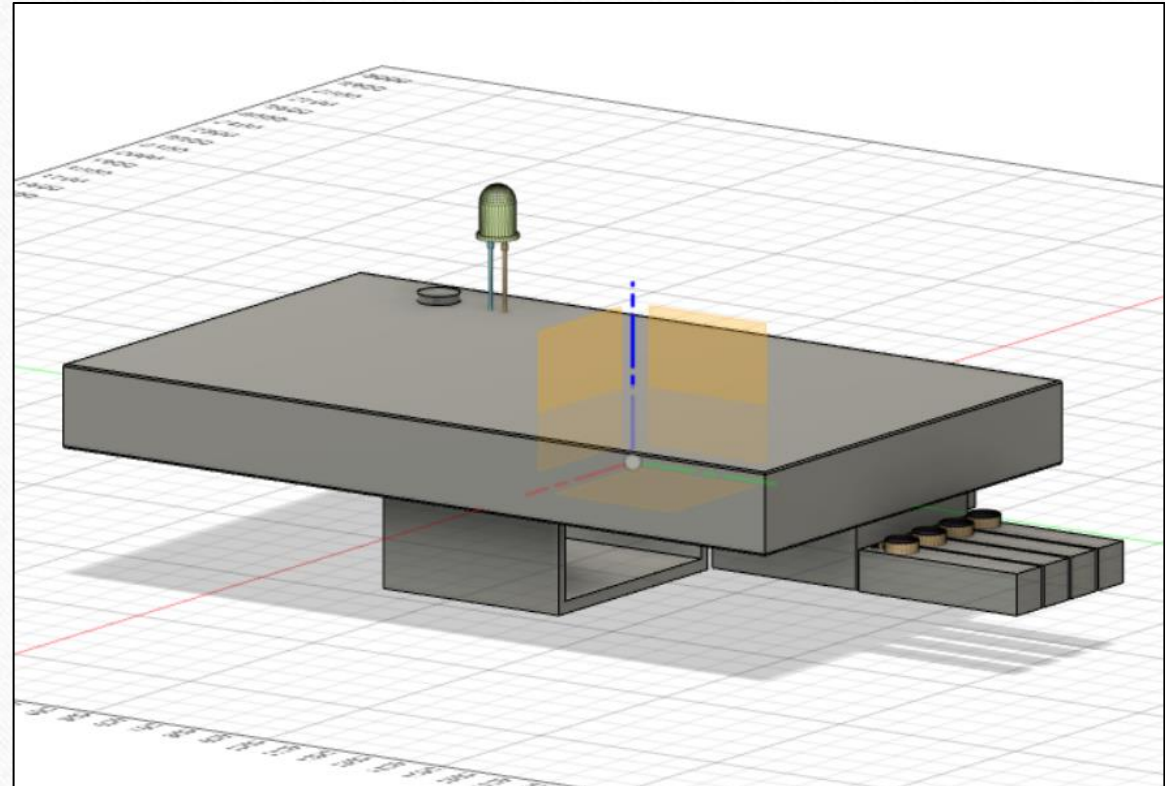
Hardware Tool – Haptic Glove Lite

- Haptic Feedback Glove for VR
 - Enhance VR Experiences
 - No Motion Tracking
 - No Force Feedback/Movement Restriction
 - Meant to be Cheap and Compact
- Solo-Project
- Fully Virtual Unity Prototype



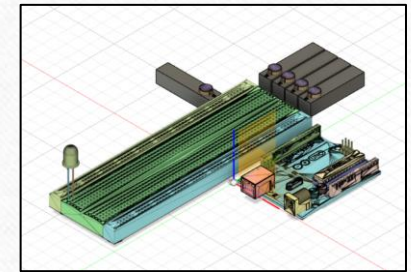
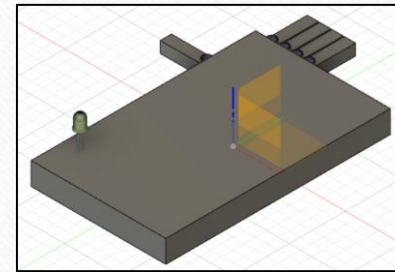
Hardware Tool – Updated Design Showcase

See Video Presentation and Assignment
Repository

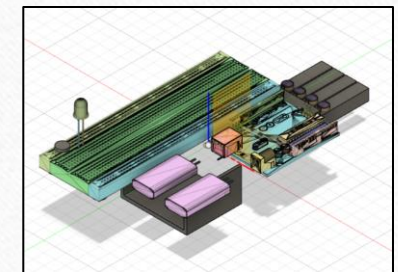
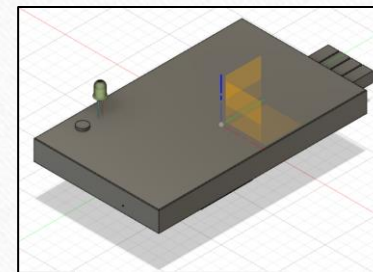


Design Updates

- Added Power Button
- Changed LED Position
- Added USB Port
- Added Internal Batteries
- Changed Glove Positioning
- Added Arm Strap



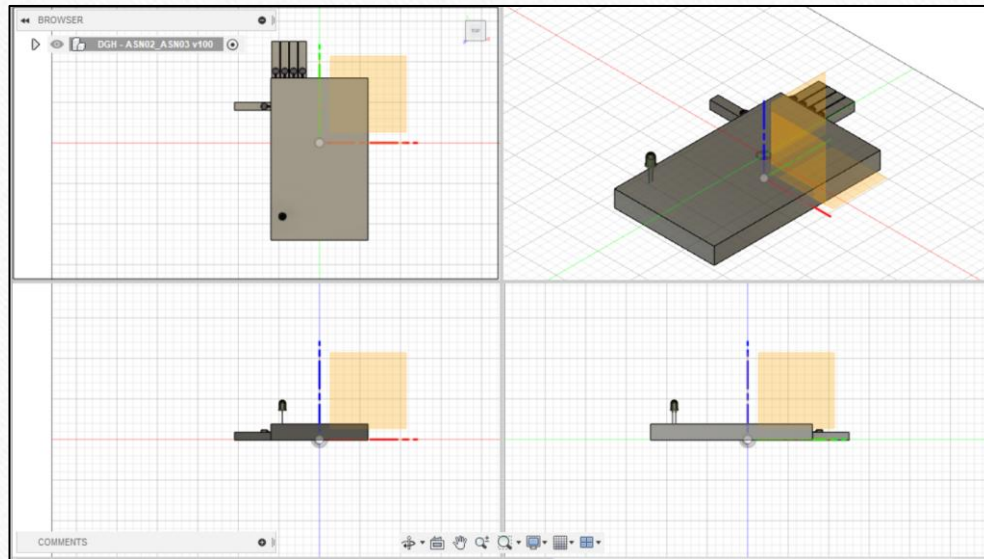
Assignment 2 + 3



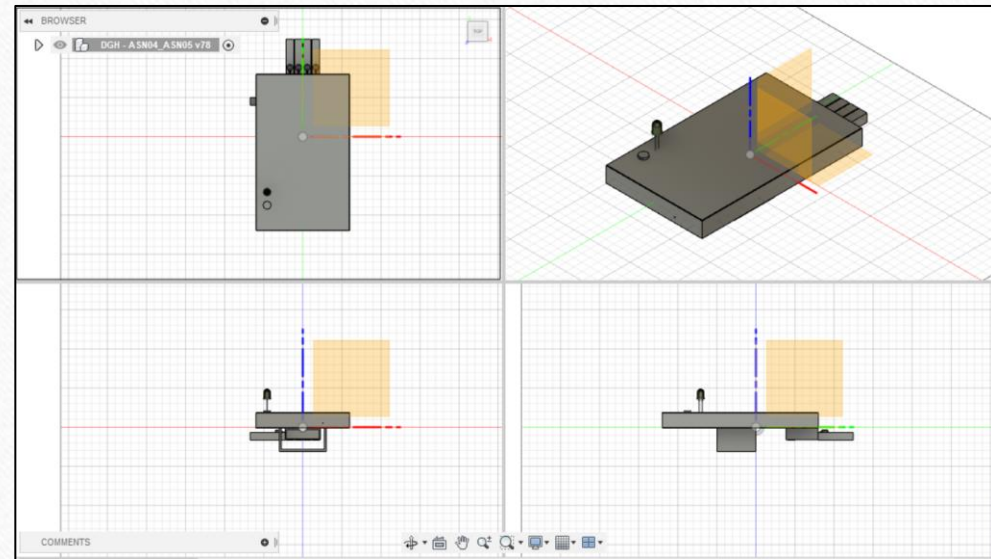
Assignment 4 + 5

Design Comparisons – Full Body

Assignment 2 + 3

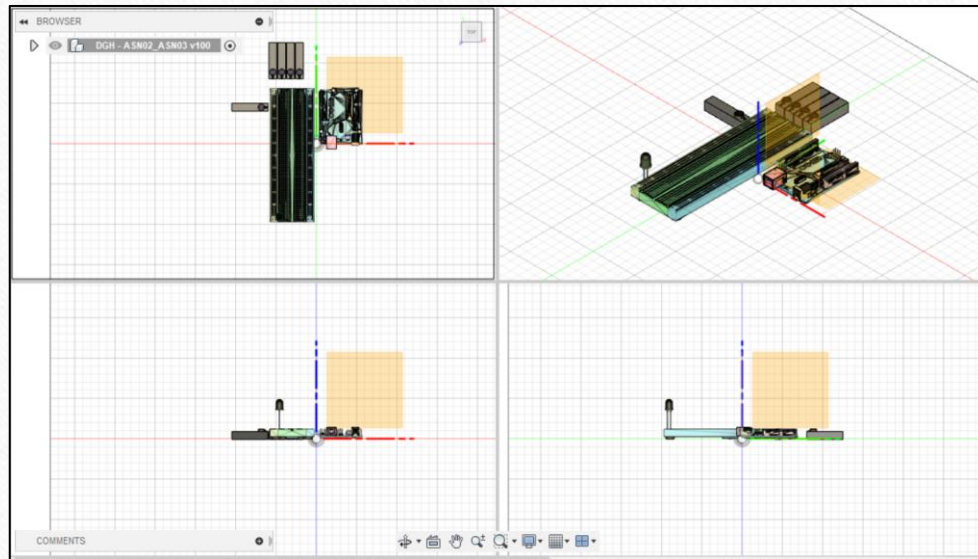


Assignment 4 + 5

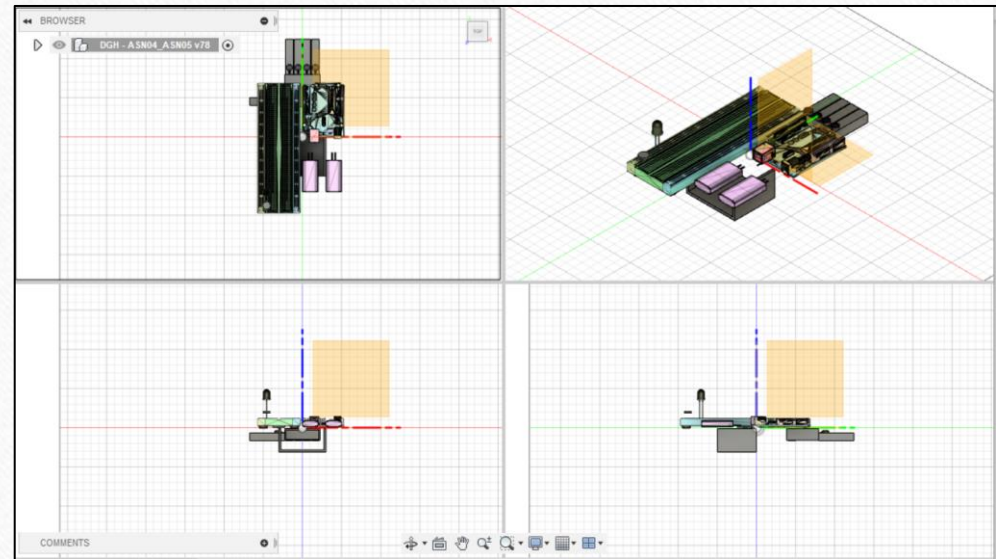


Design Comparisons – Internals

Assignment 2 + 3



Assignment 4 + 5

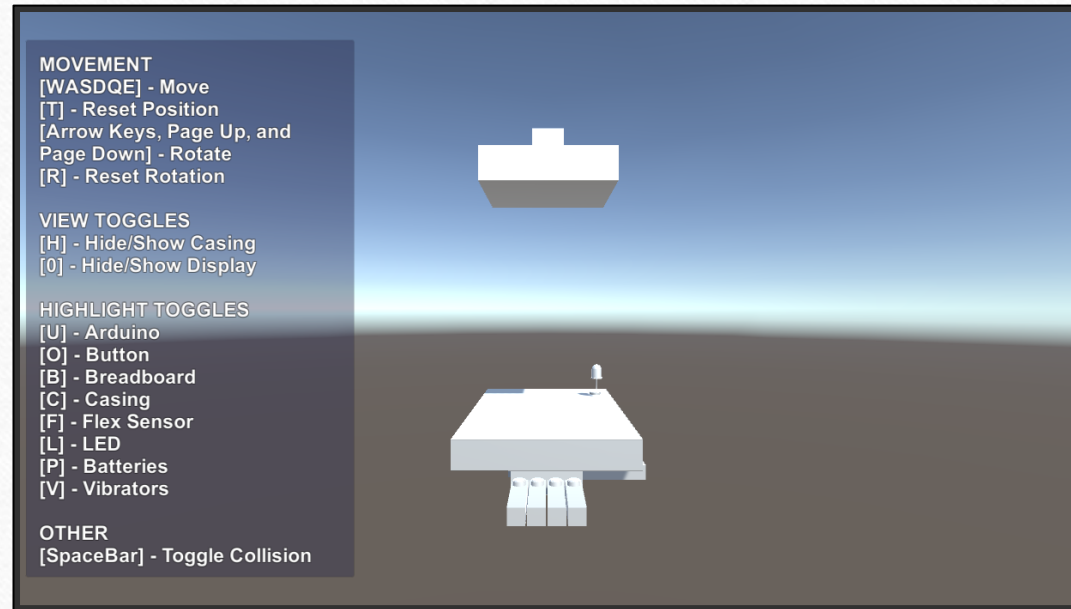


Virtual Prototype

Unity Project

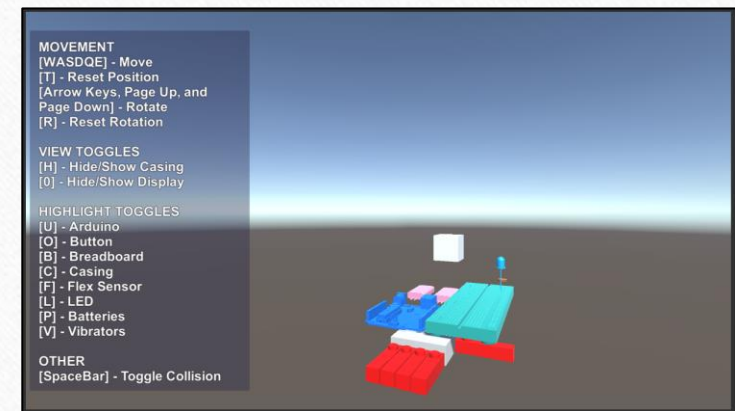
Virtual Prototype – Showcase

See Video Presentation and Assignment
Repository



Virtual Prototype – Unity Project

- Highlights Parts with Different Materials
- Highlights Vibrators and Fingers to Show Contact
 - Vibrators Generate Feedback
 - Vibrations Would be Felt by Fingers
- Show/Hide Casing to Show Internals

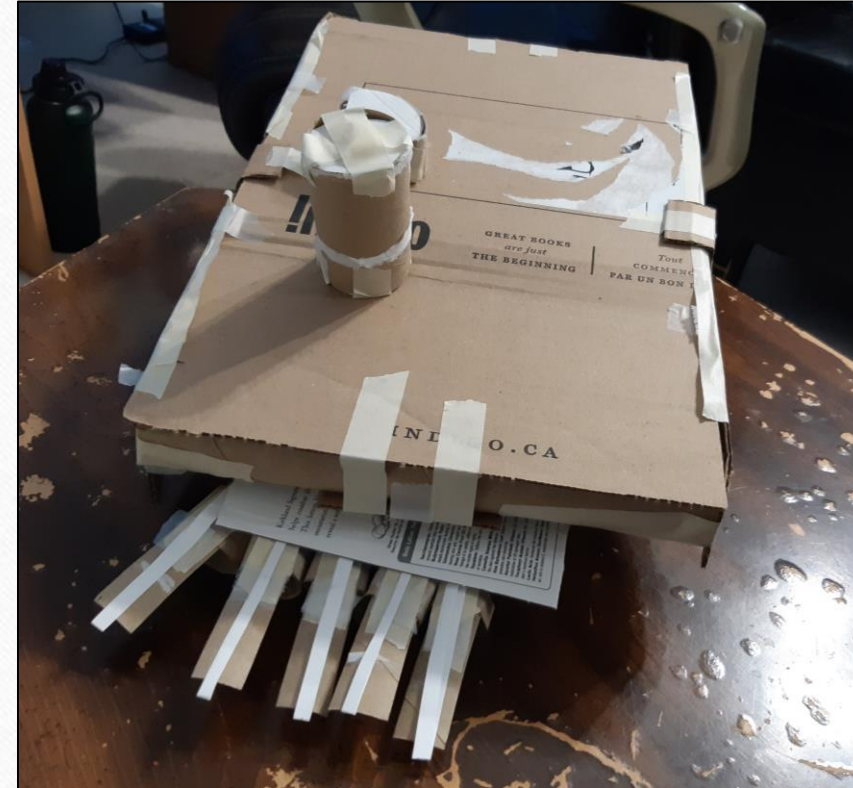


Paper Prototype

Hardware Approximation

Paper Prototype – Showcase

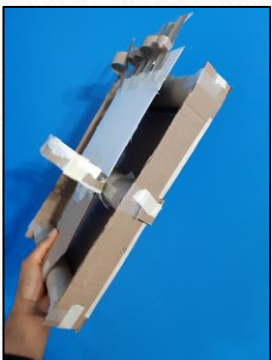
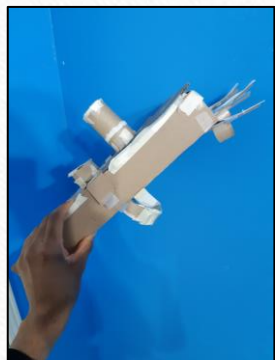
See Video Presentation



Paper Prototype – Images (1/2)



Paper Prototype – Images (2/2)



Final Plans

Plans for the Final Submission

Plans for the Final Submission

- Add Component Materials to the Virtual Prototype
 - Fusion360 Exports Do Not Keep Their Materials
- Animate Fingers for Virtual Prototype
- Compile Project Iterations
 - Showcase All Project Progress

END

Thank You for Listening