

David Williams and Lauren Gresko

Final Project Checklist

6.111

- Video input processing

- 1) Segmentation of colors (armbands vs. background)
- 2) Finding centers of armband locations
- 3) Fusion of 2-D coordinates into 3-D (can degrade gracefully e.g. for hidden points)
- 4) Fusion of 3-D coordinates into bone coordinate pairs

- Rendering

- 1) Coordinates for rectangular prism generated from bone coordinate pairs
- 2) Perspective transformation to 2-D
- 3) Shading: color should reflect lighting
- 4) Rendering: polygons are coincident, don't occlude each other
- 5) VGA output with double buffering

- Stretch goals

- 1) Camera can be moved
- 2) Real-time performance
- 3) Goraud shading
- 4) Input robustness, e.g. filtering armband positions