Part 2: First Touch - INSTRUCTIONS FOR MICHAEL

**Follow these EXACT steps to complete Part 2**Time: 2-2.5 hours • Goal: 'I've Used Every Tool!'

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| MICHAEL: Do These Steps Exactly | JESSE: Your Support Tasks | ✓ Check When Done |
| **STEP 2.1: EXPANDING BASICS**  **1. AutoCAD - 3D Structure**  → Open greenhouse\_base.dwg  → Type: EXTRUDE [Enter]  → Select rectangle → Height: 3000 [Enter]  → Type: 3DORBIT [Enter] → Rotate view  → Type: ARRAY [Enter] → R [Enter]  → Rows: 2, Columns: 3  → Row offset: 8000, Column: 12000  → Save as greenhouse\_3d.dwg  **2. Substance - Aging Wood**  → Open wood\_test.spp  → Add Fill Layer → Add Black Mask  → Add Generator → Dirt  → Grunge Amount: 0.3  → Add Paint Layer → Paint wear edges  → File → Export Textures → 2K → wood\_aged/  **3. Maya - Character Limbs**  → Open basic\_setup.ma  → Multi-Cut Tool → Add loops at 0.3, 0.7  → Select faces → Extrude → Translate Z: 1.5 (arms)  → Select bottom faces → Extrude → Y: -2.0 (legs)  → Smooth Preview (3 key)  → Save as character\_v2.ma | Folder organization: /v2/ subfolders  AutoCAD templates Substance presets | ☐ 3D greenhouse ☐ Aged textures ☐ Character limbs ☐ Files organized |
| **STEP 2.2: ANIMATION IMPROVEMENTS**  **4. Python - Maya Automation**  → VS Code → New file: import maya.cmds as cmds for i in range(5):  cube = cmds.polyCube(n=f'cube\_{i}')  cmds.move(i\*3, 0, 0, cube[0])  cmds.setKeyframe(cube[0], at='translateY', t=1, v=0)  cmds.setKeyframe(cube[0], at='translateY', t=24, v=5)  → Save as animate\_cubes.py  → Run in Maya → See 5 animated cubes!  **5. Facial - More Expressions**  → Add 3 more blend shapes:  → Sad: Scale Y: 0.8  → Angry: Move brow vertices down  → Surprised: Scale eyes 1.5  → Set keys: Frame 1, 30, 60, 90  **6. Hair - Better Dynamics**  → hairSystemShape1:  → Stiffness: 0.05  → Damp: 0.2  → Add Wind Force → Magnitude: 5  → Cache → nCache → Create | Python shelf: Quick export button Batch operations  Cache folder setup | ☐ 5 animated cubes ☐ 4 expressions ☐ Hair cached ☐ Wind working |
| **STEP 2.3: INTERMEDIATE TOOLS**  **7. Cloth - Shirt**  → Create plane (10x10, 30 subdivisions)  → Position around character torso  → nCloth → Create nCloth  → Presets → Silk  → Input Mesh Attract: 0.2  → Cache simulation  **8. Crowds - MASH Network**  → Select character\_v2  → MASH → Create MASH Network  → Distribute → Grid → 3x3x1  → Random → Position: 0.5  → Color → Random Hue  **9. Mocap - Walk Cycle**  → Mixamo → Download "Walking"  → Import → Human IK → Characterize  → Bake to skeleton  → Trim to 30 frame loop | MASH presets Mocap library HIK templates | ☐ Shirt simulated ☐ MASH grid ☐ Walk cycle loops ☐ HIK working |
| **STEP 2.4: RENDERING PIPELINE**  **10. Houdini - Terrain**  → File → New  → Tab → heightfield [Enter]  → Tab → heightfield\_noise  → Tab → heightfield\_erode  → Amplitude: 100, Size: 50  → Export → terrain.bgeo  **11. V-Ray - Materials**  → Hypershade → Create → VRayMtl  → Diffuse: Load wood texture  → Reflection: 0.2  → Assign to objects  → Render 1280x720  **12. Nuke - Composite**  → Read → Load V-Ray render  → ColorCorrect → Saturation: 1.2  → Blur → Size: 2  → Write → Output: comp\_v2.jpg  **13. Unity - Import All**  → Import character\_v2.fbx  → Import terrain.fbeo  → Materials → Standard → Albedo: wood texture  → Lighting → Directional Light → Intensity: 1.5 | Render settings Nuke templates Unity packages | ☐ Terrain created ☐ Materials assigned ☐ Comp exported ☐ Unity assembled |