

Organic Prop | Project Brief

Description

In this project, you will create a real-time production-ready 3D model of an organic prop using Maya, ZBrush, Marmoset Toolbag 4, Substance Painter, Unreal Engine, and Autodesk Flow. This setup provides opportunities for organic prop detailing with ZBrush and a collaborative Agile workflow through Flow, facilitated by our Production Managers.

Project Workflow and Structure

For task management and scheduling, we'll use an Agile approach in **Autodesk Flow**, guided by three **Production Managers**. They will oversee Flow, collaborate with each artist to set up tasks and assets, and help maintain project progress

Start Date: October 29 End Date: November 26

Sprint Review/Check-In: November 14

Each student will:

- 1. Bid their time estimates for each pipeline step based on capacity.
- 2. Work with a Production Manager to set up tasks and deadlines in Flow.
- 3. Update task statuses

Pipeline Steps: Tasks needed to complete our Assets

Tasks	Description
PureRef Board	Collect high-quality references to support organic detailing in ZBrush.
Stub	Create a foundational proxy in Maya and Game Engine
Block-in	Establish the form and proportion of the model.
High Poly	Finalize the high poly sculpt in ZBrush.
Optimization	Finalized Topology and UV Layout
Texturing	PBR or Hand-Painted Textures Complete
Integration	Final Game-Ready Asset Lit and Rendered in Engine
Final Deliverables	November 26 th

Submission:

All deliverables will be submitted under your class sections corresponding UIW3D Forums thread: www.forums.uiw3d.com They will be due before the beginning of class on the listed due date. No late assignments are accepted.

Grading:

See the rubric/grading checklist for the final turn-in for this project. The specifics of each deliverable will be detailed on the forums. Grades will be adjusted based on accurately following the deliverable requirements outlined there.

Grading Checklist	Earned	Possible	Feedback
PureRef Board		5	
PureRef (Reference Board) The reference board should include high-quality and relevant images that are well-organized and annotated. The depth and variety of references should demonstrate a comprehensive understanding of the			

Stub	5

Stub (Initial Model Stub)

electronic device's design elements

The initial model stub should establish the basic structure and form of the electronic device. The initial topology isn't a priority, but needs to provide boundaries and a solid foundation for further development

Block-in	10
Block-in (Block-in Model) The block-in model should accurately represent the overall shape and proportions of the electronic device. The topology should be clean, and basic detailing should be evident.	
High Poly	20
High Poly (Final High Poly Model) The final high poly model should be detailed and accurate, with clean and optimized topology built for subdivision. The model needs to effectively represent the selected electronic device.	
Optimization	15
Optimization (Final Optimized Model) The final optimized model should be low poly, with a focus on preserving detail while maintaining clean and efficient topology. No unnecessary edges, vertices, or faces.	
UVs (Clean and Efficient UVs) The UVs should be clean and efficiently laid out, with minimal distortion and optimal use of texture space. UV islands should be logically organized and scaled appropriately.	
Texturing	15
Bakes (Clean Bakes) The final bakes should be clean, with no artifacts or errors. Normal maps, ambient occlusion, and other baked maps should accurately represent the high-poly details.	
Textures (Final Textures) The final textures should be high-quality, demonstrating proficiency in PBR texturing techniques. Textures should be detailed, realistic, and enhance the overall appearance of the model.	
Integration	10
Rendering (Final Rendered Images) The final rendered images should be of high quality, with effective lighting and composition. The presentation should be professional, showcasing the model from multiple perspectives	
Final Deliverables	20
Submission Final game-ready and production ready source assets. Presentation and portfolio ready renders.	
Total Points Earned	/100