

MODULE 10 — DESIGN PROJECT & REFLECTION

2019 Toyota RAV4 Adventure

Object Description

The object I chose is the 2019 Toyota RAV4 Adventure, a rugged, sport-oriented trim built for drivers who want both city comfort and off-road capability.

Aesthetic Overview:

- Chunky fender flares
- Two-tone exterior options
- Large, squared front grille
- 19-inch wheels with all-terrain style tread
- Orange interior stitching and rubberized textures

Functional Overview:

- Dynamic Torque Vectoring AWD
- Multi-Terrain Select (Mud/Sand, Rock/Dirt, Snow)
- 2.5L 4-cylinder engine
- 8-inch touchscreen with wired Apple CarPlay
- Large cargo capacity
- Roof rails and higher ground clearance

User Research — Interview Questions & Responses

Interviewee: My Brother, Andrew Than, who drives a 2019 RAV4 Adventure

1. What do you like about the 2019 RAV4 Adventure?

“I love how tough it looks. The AWD feels great in the snow, and the orange interior stitching looks really clean. The cargo space is good too.”

2. What do you NOT like about it?

“The engine gets really loud when accelerating. The screen sometimes lags. The interior plastic scratches super easily. The ride can be stiff.”

3. What would you change?

“I’d want a quieter engine, faster touchscreen, wireless CarPlay, and better headlights at night.”

Design Solutions — Improved RAV4 Adventure

A. Upgraded Infotainment System

- Keep wired Apple CarPlay but add ****Wireless CarPlay + Wireless Android Auto****
- Upgrade to a ****10.5-inch HD screen****
- Add a faster chipset to eliminate lag
- Add haptic touch feedback
- Improve UI visuals (brighter icons, better contrast)
- Add a dedicated Home + Back button for safety

B. Quieter Engine & Cabin Noise Reduction

- Add under-hood insulation
- Improve windshield and window acoustic glass
- Smooth high-RPM shift tuning

C. Softer Suspension System

- Softer shock absorbers
- Optional Adaptive Ride Modes (Comfort / Adventure / Sport)
- Better bushings to reduce road harshness

D. Stronger Interior Materials

- Replace scratch-prone plastic with rubberized soft-touch materials
- Add reinforced fabric options

E. Enhanced Lighting Package

- Full LED high-output headlights
- Adaptive cornering beams
- Increased nighttime visibility

Reflection

My experience with this assignment was interesting because I currently drive this car and had an overall good experience with the car. Instead of making something expressive, I focused on possible improvements, based on my brother's feedback and my own. It felt more structured than purely artistic work, but also more rewarding because the improvements had a clear purpose.

The process felt different from the artistic impulse to create. Artistic creativity feels emotional and open-ended, while this project felt analytical and almost like engineering. Still, both rely on imagination, just directed in different ways. I enjoyed both approaches, but designing solutions felt especially satisfying because it had a clear goal: improving the user's experience.