

AI GENERATED - CROOKED SHUTTER TREEHOUSE - CASE STUDY STRUCTURE

Title:

Designing a 285 sq. ft. Immersive Stay: How I Built Crooked Shutter Treehouse Like a Product

Visual Portfolio

Include:

- Experience Map diagram - [Mind mapping treehouse idea using FreeMind](#)
 - Floor plan wireframes / Blender 3D renders - [YouTube 3D model created using Blender](#)
 - [YouTube playlist](#) of all everything from inspiration, to designing and building the CST
 - Website homepage - [CrookedShutterTreehouse.com](#)
 - [Welcome Book](#)
 - Airbnb Listing view when it was active - [Airbnb Listing View](#)
 - Guestbook quotes or review highlights - [366 - 5 Star Reviews](#)
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1. Introduction

General Statement: This Case Study Structure is the culmination of all the documentation I have created regarding the design, development and management of the Crooked Shutter Treehouse.

Project Summary

- **Role:** Architect, Designer, Interior Designer, Builder (General Contractor), Operations Manager, Host
- **Duration:** 6+ months from design to launch
- **Tools:** Blender, Airtable, Adobe CC, WordPress, Airbnb tools
- **Team:** Solo build, partnered with guests + the environment

Purpose

- How do you create a *delightful, brand-aligned, scalable experience* within a confined physical footprint, without sacrificing personality or comfort?

3. 🔍 Research & Opportunity Framing

Challenge:

“What if I could design a stay that feels like an adventure, a retreat, and a memory-maker—all in one compact, analog-yet-digital experience where people feel they have to return?”

Research Insights:

- Reviewed Airbnb guests and hosts feedback from other unique Airbnb stays
 - Observed common pain points: unclear check-in, poor flow, generic spaces
 - Mapped emotional states during travel: **Excitement** → **Uncertainty** → **Comfort** → **Memory**
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4. 🧠 Strategy & Experience Mapping

Design Philosophy:

- Every touchpoint is a brand moment—from the gravel crunch in the driveway to the way the lamp casts a shadow.

Experience Map (You’ll Want a Diagram Here):

1. **Mind mapping:** Use FreeMind to map out the different business channels and experience perspectives for the success of the listing - [Mind mapping treehouse idea using FreeMind](#)
 2. **Booking:** [Airbnb listing](#) copy, photos, and tone match the stay’s emotional promise
 3. **Pre-arrival:** Custom welcome email with link to a digital [Welcome Book](#) (PDF or FlipHTML5)
 4. **Arrival:** Simple navigation, intuitive parking, self-check-in flow
 5. **Stay:** Interior flow optimized for small space, custom furniture design, multisensory inputs (wood smell, dimmable lighting, silence)
 6. **Departure:** Clear closing loop, gratitude text, follow-up request
 7. **Memory Loop:** Guests share on Instagram / reviews. Designed “photo moments” in exterior
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5. 🛠️ Prototyping & Building the System

UX Systems Created:

- **Physical Design:** Modeled treehouse in 3D, A/B tested layouts, mocked user movements - Floor plan wireframes / Blender 3D renders - [YouTube 3D model created using Blender](#)
 - [YouTube playlist](#) of all everything from inspiration, to designing and building the CST
 - **Operational UX:** Built a “service blueprint” to reduce guest confusion and host time
 - **Content System:** Copy tone guidelines, story-driven visual language
 - **Feedback Loop:** Used Airbnb guest data to iterate space usage & site flow
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6. ✨ Key Design Solutions

- **Custom Pallet-Wood Furniture:** Doubled as design elements and usability enhancers
 - **Outdoor Shower Experience:** Designed to feel adventurous but comfortable—even in winter
 - **Lighting System:** Layered, dimmable lighting for emotional variation
 - **Website Storytelling:** Created [CrookedShutterTreehouse.com](#) to extend the brand beyond Airbnb
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7. 📊 Results

Metric	Outcome
Guest Rating (Airbnb)	5.0 avg. from 366 reviews
Occupancy Rate	~85% in Year 1
Conversion Boost	+12% after onboarding redesign
Return Guests	Multiple 3-time returning guests
Featured In	Lake Norman Mag, Escape Blogs, LKN Podcast

7. 🔄 What I'd Do Next

- **Integrate Digital Check-in UX** into Airbnb Host Tools
- Create a “Mini UX Kit” for micro-stay hosts (small footprint)
- Run A/B tests on emotion-driven copy vs. standard listings
- Connect booking data to design system iterations