

Infotainment Platform for Children's Handheld Device

Embedded Firmware

Display & Audio Driver Development

Game Development

Asset Integration

CLIENT

A US-based company developing handheld products for popular children's entertainment platforms.

THE PROBLEM

The client was building a handheld device for children aged six and up and wanted it to launch with a genuine suite of games — not one game, a suite — covering spelling, pronunciation, arithmetic, and general entertainment, each with its own custom artwork and sound. That's a games platform, not a single game: it needed the underlying display and sound capability built first, and then enough actual content built on top of it to feel like a real product at launch.

WHAT WE BUILT

We built the display and sound driver software for the handheld device as the foundation — without working sound and display drivers, none of the games could exist regardless of how good the game design was. With that foundation in place, we built out the suite itself: separate games for spelling, pronunciation, arithmetic, and general entertainment, each with its own custom artwork and audio integrated in, and each following its own logic flow appropriate to what it was teaching or entertaining with. The goal across the whole suite was consistency in quality and engagement for the six-and-up age range, while each game still had its own identity rather than feeling like a template reused four times.

WHAT IT DOES

- ✓ Custom display and sound driver software built as the foundation for the entire device
- ✓ A suite of distinct games covering spelling, pronunciation, and basic arithmetic, plus general entertainment
- ✓ Custom artwork and audio integrated individually into each game in the suite
- ✓ Each game runs its own logic flow, tailored to what it's teaching or entertaining with, rather than a shared template
- ✓ Built the platform from drivers up to a launch-ready content suite, not just a single demo game

OUTCOME

The client launched with a genuine suite of games rather than a single title — drivers, artwork, sound, and gameplay for each game built out individually, giving their handheld device a real content library from day one.