



## Client Overview

- Software provider for car infotainment equipment



## Business Requirements

- The platform is a car multi media controller software which integrates with hardware utilities (smart phone, media player, USB/ connectivity)
- Validate the data flow, interruptions or missing connections of hardware components
- Perform Data Validations and negative scenario validations
- Achieve maximum test coverage with diagnostic testing
- Automate the scripts to validate the functional data flows



## Our Solutions

- Performed white box tests to validate system software components, assessed the code for bottlenecks
- Created embedded test cases for diagnosing the hardware and software components
- Created sub routines within primary functional logic to execute hardware interrupts
- Verified system for data flows – correct input and outputs
- Used simulators for various hardware components like display (GLCDs), Keypads, Microphones and some sensors, reducing in cost per testing cycle
- Created automation scripts to derive repeated behaviour of the system to meet the functional and non functional requirements
- Developed and executed test scripts to verify compatibility across device platforms (android based tablet displays)



## Technology

- Android 4.4, 5 & 6

### Tools

- Micro vision IDE, Keil Simulator, C



## Business Impact

- Facilitated adequate code coverage with Code Assessments
- Created reports that showed trends in test results over time
- 20% effort reduction in test execution through automation



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