

# Scanning Inventory

Over the weekend when completing a shift at Carmax, one of my duties is to scan our lot. The purpose of this task is to keep track of all of our inventory and make sure every vehicle is in the correct zone. The Motorola MC900 is a handheld device used to scan barcodes attached to every car in our property. Every zone in the lot has a specific code assigned in which must be programmed before beginning to scan cars that belong to that specific zone. I have to physically walk to every vehicle and scan the barcode. Based on the appearance of the technology, I can see and

process in my head that is a handheld device, however; the process of completing this task lacks on **error tolerant** and being **learnable**. I recall when I first started doing this task it took me about two weeks to remember all the steps to complete this job. It is not learnable friendly. First, I must clear any existing data before I begin a new scan of the inventory. I then begin to scan the cars within their corresponding zone from where they are parked. Once the full scan is completed I must connect to my computer and upload it to our local database. Some days I encounter more errors than others. There are days that I personally forget to scan the zones or I scan the incorrect zone. In addition, there are zones in the lot that only accept certain number of cars, so I must carry with me a second Motorola device so I can

add the data that does not fit in the first device. They should expand their network around the lot because there has been times where I loose network connectivity and all my data gets erased and at that point, I must begin to scan from the very beginning. This full process takes me about an hour to complete, its very upsetting when my data gets erased when I am near to finish. They should program their database where I can have unlimited vehicles in the same zone to prevent carrying two devices due to memory.





Another suggestion would be **efficient**, there are seasons in the workload where we have more cars than others. That one hour process increases. I suggest each car should have a proximity sensor sticker where it's in windshield and that results in a faster scan and better network to prevent data loss and time consuming. The full system could have benefited from conceptualizing the design before launching this full system. Now since the product is being used daily, the design team should reach out to carmax employees, who actually use the product everyday for feedback, and interviews to help improve the scanning system.

