AT&T

Implementation of Cannon Tag app using Bluetooth technology to track bots which identify network failures at Stadiums

AT&T USA

AT&T is an American Multinational telecommunications corporation, providing wireless data and voice services. AT&T is the largest provider of mobile networks in the USA and is headquartered at Dallas, Texas. AT&T has been a pioneer in network quality is are widely regarded as the provider with the best wireless network. One of AT&T's new initiatives is to track objects known as bots, which identify network failures and drops due to congestion in large spaces like stadiums.

The Challenge

AT&T have placed several bots in many stadiums, to track the performance of the AT&T network, to check for dropped calls or lost network for voice and data. They had many people stationed in the stadiums, to physically locate each of these bots when they needed to be monitored for a battery change or other maintenance. There were many instances when the people stationed were not able to locate these bots, leading to several dysfunctional bots. AT&T were in need of a technology used to locate these bots remotely to help enable easy tracking and identification.

Software Merchant

Software Merchant is well positioned in the Mobility segment of the outsourced product engineering market. We provide cost effective and efficient solutions by using best practices and employing a smart combination of experts from our worldwide pool of resources. We bring in local consultants with domain expertise to better understand the business and ensure seamless communication with our clients.

The Solution

Software Merchant helped implement a solution in the form of the Cannon Tag mobile app, which involved introducing a specially designed mobile device inside the bot and this device comes equipped with a Bluetooth sensor. This Bluetooth sensor helps identify the location of the device from a remote location, using an iPad app designed by Software Merchant. At the remote location, the person responsible is using the app to scan for cannon tags to access the information of each bot placed in the stadium. These bots are differentiated by their custom IP address and are identified by a particular naming convention for the Bluetooth device.

Use of the Bots

The bots have an Android device placed in them, which would track the AT&T network on all devices making calls, clicking pictures, etc. By tracking the phone networks, this tool updates a website to return the information to AT&T. When AT&T receives feedback on a network crash, they install extra antennas in the stadium to ensure better network coverage.

Benefits

- This app helps eliminate manual labor, reduce staff and increase the efficiency of the bot search process

- Turnaround time for each cycle of this process is reduced by eliminating the manual effort of searching the whole stadium to locate the bots

- The application enables you to remotely locate each individual cannon tag, with the help of an LED button placed on the bot

Exhibits

Exhibit 1: Page to scan the various cannon tags in Farmers Branch stadium

Exhibit 2: Individual cannon tag information