

Abstract

Cal Poly Smart Parking, herein referred to as CPSP QR Code Initiative, is developed to reduce the wait times student, staff, and guest drivers experience when searching for a parking spot on campus. Cal Poly is currently undergoing a large growth in student population, and, as a result, is experiencing congestion in parking lots. Drivers will commonly spend frustrating amounts of time “vulturing” these parking lots for an open spot. CPSP QR Code Initiative consists of a database that is controlled by user submitted data through QR codes scanned on a user’s smartphone. This system will provide drivers with a convenient tool that allows them to visualize which parking spots are available in each respective lot. The entire concept has been experimentally implemented on a Windows Server 2008 RS host using ASP.NET programs to interact with a smartphone which has QR Reader application installed at Cal Poly parking lot H-12.