

# AUTOMOBILES

## CASE STUDY – AUTOPIA



### 1.1. ABOUT CLIENT

Autopia specializes in providing custom Car washes and Car detailing services to their customers. They do have service centers in seven locations throughout the Bay area including Fremont, Walnut Creek, Concord, Livermore, Martinez, Dublin and Newark. Currently they are offering following services

- Exterior Advantage: In and out car wash in few minutes.
- Super Wash: Basic car wash with exterior and interior cleaning with single wax coat.
- Works Wash: Includes Basic + three wax coats + underbody wash
- Ultimate Wash: Works Wash + Exterior dressing
- Detailing Services: Custom service could include hand waxing, carpet cleaning and enhancements to various custom packages.
- Hand Wash: Hand washing of the cars. Generally this service is more expensive than basic wash.

Along with above the major business service of Autopia is VIP unlimited wash program which allows the customer to have unlimited car washes with low monthly fee. Customer has to subscribe for the VIP plan abiding all terms and conditions.

Autopia vision statement is to ***"provide a positive experience for customers through our signature car care system designed to enhance and maintain a vehicle's appearance"***.

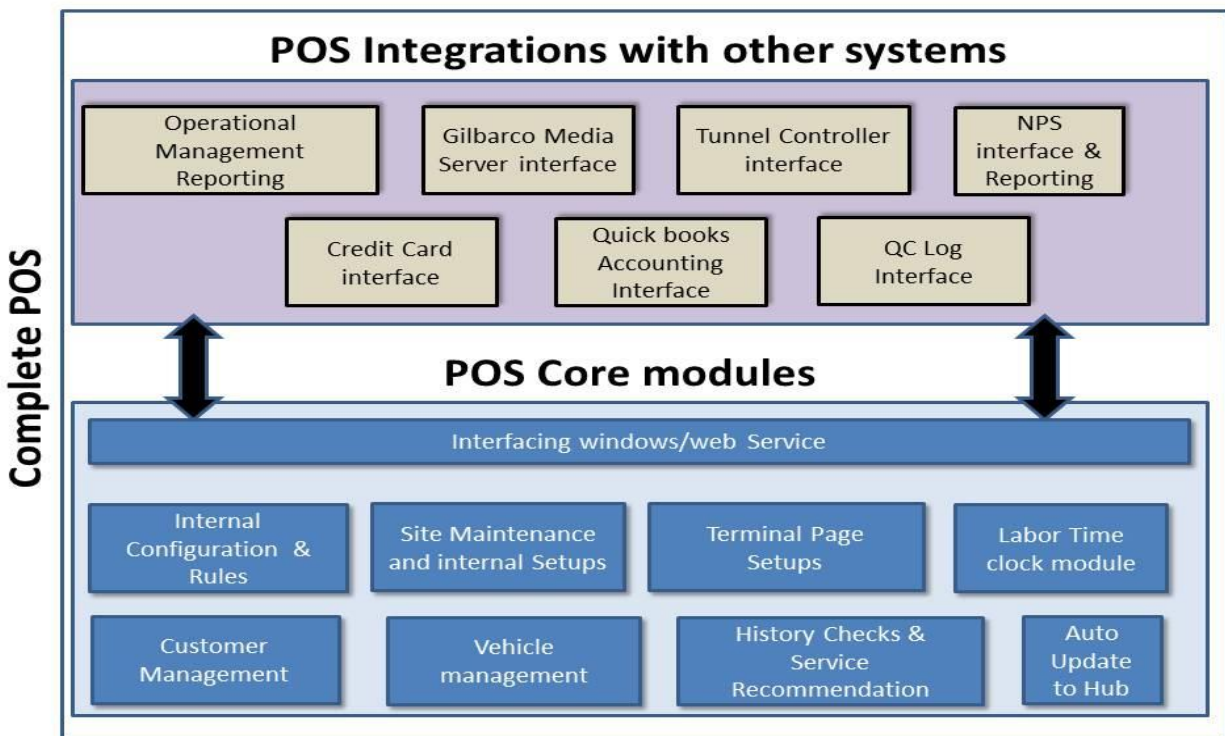
Autopia follows major state guidelines including labor laws and water treatments.

## 1.2. PRODUCT INFORMATION

The entire POS scope includes following components

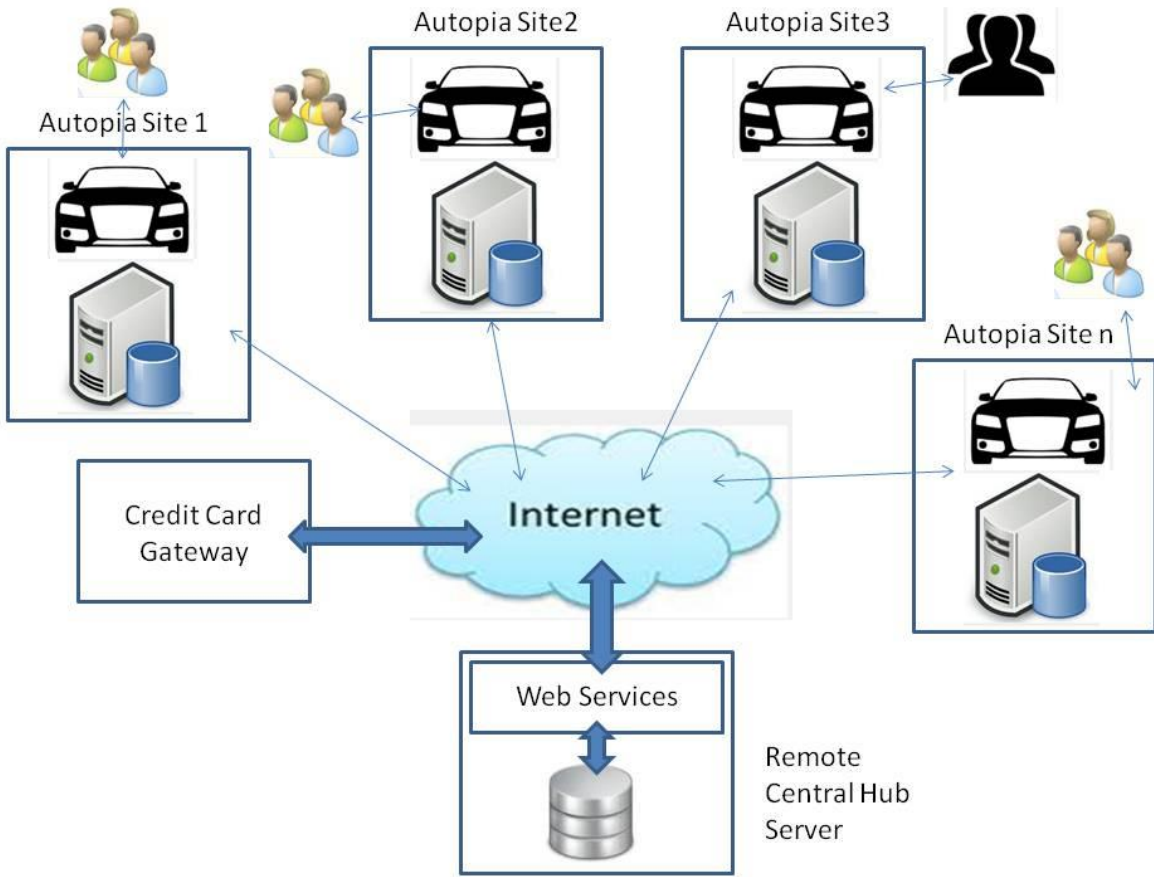
- Core POS system
- Internal configuration
- Site maintenance and internal setups
- Terminal Page setups
- Labor time and shift change module
- Customer Management
- Vehicle Management
- History checks and Service recommendations
- Data auto update to Hub and central POS
- POS Architecture
- Operational Module and Reports
- Interfacing with Tunnel Controller
- Interfacing with NPS
- Interfacing with QC log
- Interfacing with Gilbarco Media Servers
- Interfacing with Quick Books
- Direct integration with Credit card gateways for single and recurrent transactions.

The scope of the application can be further defined in the screen below

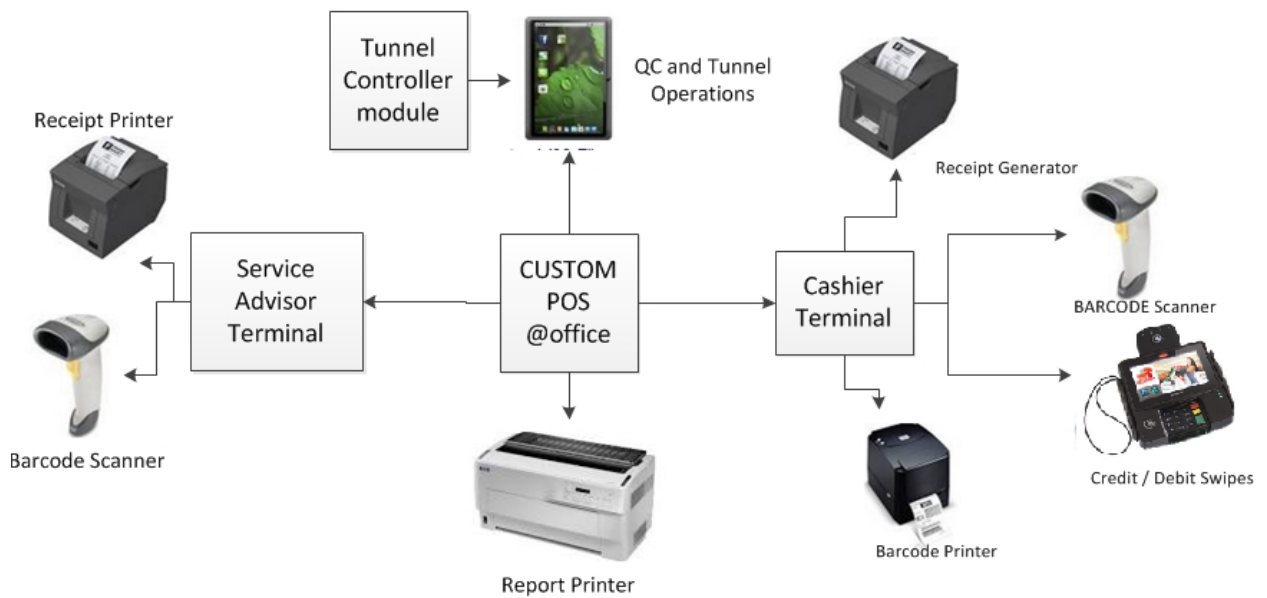
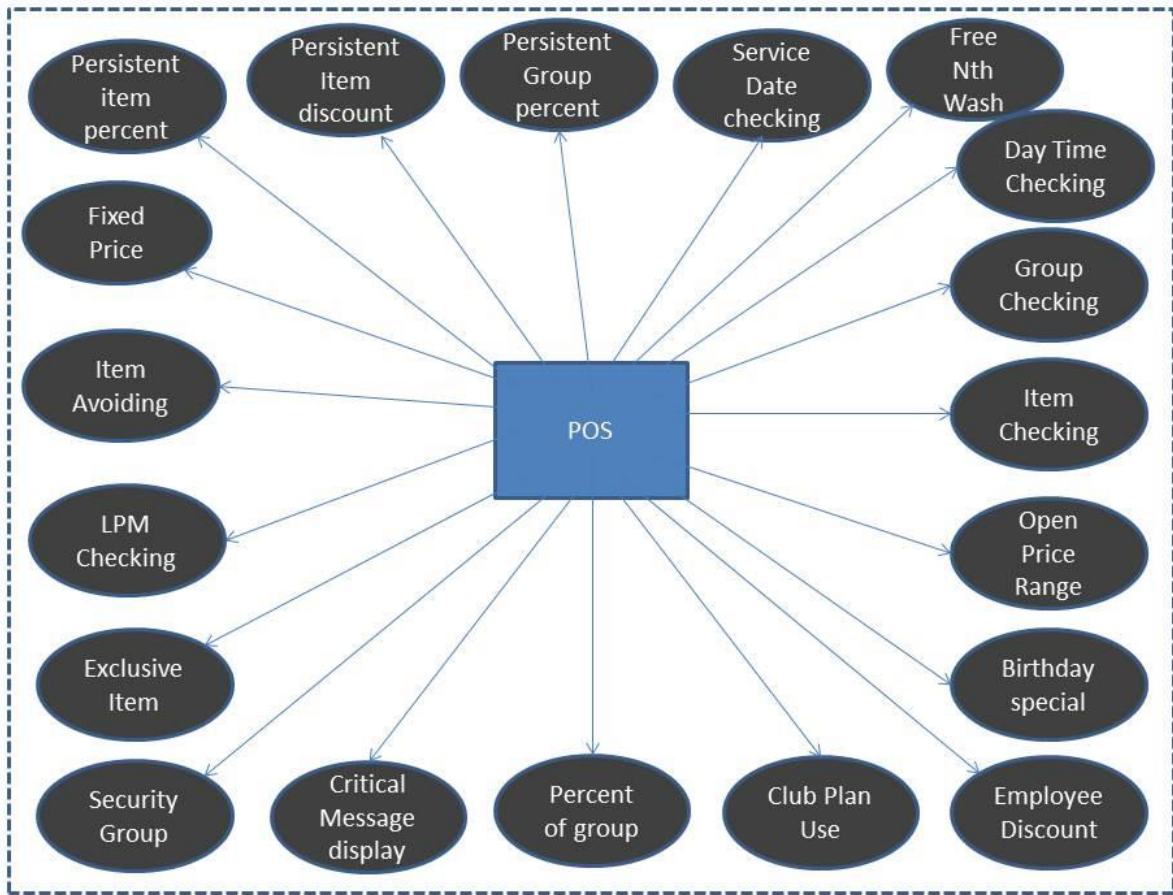


### 1.3. RETURN ON WEB CONTRIBUTION AND WORK PROFILE

- To identify the Signature Car wash System that will be produced.
- To describe what the System will do and if necessary what they will not do.
- To describe/specify the benefits, objectives and goals of the System
- To ensure that all functional requirements of the System are captured.
- To ensure that requirements for the Systems are defined and clearly understood.
- To track the requirements with the User Acceptance Test Cases.
- Analysis the module specific requirements in depth and creation of module SRS and freeze it.  
Requirements traceability
- Creation of Actual UX prototype and freezing.
- Creation of Architecture document including class diagrams, object interaction, state chart and sequence use cases. Required to understand the internals of module in case of handover, and to create loose coupled and extendable architecture.
- Actual development efforts and coding
- Unit test case writing to track the requirements from requirement traceability and for component testing
- Analysis and study of LPR system



### System Boundary



#### 1.4. TOOLS AND TECHNOLOGIES

<b>Operating System</b>	Windows 8
<b>Framework</b>	.Net Framework 4.5
<b>Technology</b>	Microsoft .Net
<b>Database</b>	SQL Server 2014
<b>Tools and IDE</b>	Visual Studio 2015
<b>Repository</b>	GIT