* HTML5 Pilot Project
  + Microservices:
    - Asset Summary REST Service
      * Retrieves assets/datachannels from Mongo
    - DOL REST Service
      * Public interface(API?) to access protected REST services
    - User Auth Service
      * Custom token-based authentication using Mongo
    - User Data Service
      * Retrieves data pertaining to user
  + Libraries:
    - Authentication Attribute
      * C# Attribute for requiring authentication on MVC class
    - Basic Authentication
      * Authenticates user by comparing password in header
    - REST Client Library
      * Interface for making synchronous REST calls
  + Other:
    - Unit/Integration tests for every service and library
    - Continuous integration environment
    - Consistent logging at multiple levels
    - Custom exceptions and unified handling
* Packet Counter Service
  + Problem:
    - Counting of carrier packets in the database caused excessive load, leading to slow page load time and reduced database performance
  + Solution:
    - Created microservice to perform packet counting in memory instead of database
  + Implementation:
    - The service continually reads packet message queue into hash table
    - Periodically counts packets and writes total count to database
    - The service flushes out packets that are too old to be relevant in counts
  + Practices:
    - Utilized several design patterns, including factories, interfaces, templates, and dependency injection
    - SOLID design principles to promote code reuse and reduce repetition
    - Equipped with extensive logging and unit tests
  + Result:
    - Packet count webpage load time decreased from 30 seconds to under one second.
    - Removes need to perform over 2+ million operations on DB per minute
    - Moves business logic out of database
* Google Maps
  + Cleanup of core maps code
    - Reduced pollution of global namespace
    - Moved business logic into duck-typed interface
    - Organized code through prototypes and local data structures
  + Addition of Baidu Maps
    - Implemented interface with Baidu Maps API
    - Allow Chinese customers unable to use Google access to our mapping system
  + Maps Overhaul
    - Cleaned up Maps
      * Reduced number of user states
      * Simplified presentation of data
      * Simplified navigation
      * Enforced consistency
* Build Process Enhancements
  + Build Script
    - Split monolithic build script into functions for easier modification and readability
    - Modified process to execute build script from pulled source as opposed to static location
    - Helped parallelize build script, reducing build time by about 40 minutes
  + Publish Script
    - Created script to automatically deploy published VS2013 solutions to IIS
* WiX
  + Independently learned and implemented WiX installer for our Visual Studio solutions
  + Included custom scripts to gather required files for packaging into installer
  + Improved speed and reliability for installation of services
  + Wrote documentation detailing process for creation
* Billing
  + Created program to automatically process customer billing records
  + Improved productivity of HR by automating tedious process
* Design Curve
  + Created data visualization for helium iso container showing current pressure against tank-specific pressure limit curve
  + Aided customers in determining the health of their assets while in transit
  + Offered insight into determining which container type is most efficient