# Background

This document provides objective and high level requirements for the case study project assignment to be taken up by a group. As part of assignment, group will need to interact with designated stakeholder(s) to gather exact requirements for this case study project.

# Objective

ServicePlatform is a customizable off-the-shelf horizontal solution to provide required software infrastructure to take care of complete lifecycle of a service request in the context of Field Service Management. This solution covers all aspects of system right from customer to field professional.

Develop a Field Service Management solution for enterprise users (Administrator, Manager, Supervisor, Customer Executive, Field Worker and Customer). This solution would be client-server (SAAS) solution and should allow multi-tenancy and should be hosted on cloud.

The goal of solution is to provide technical backbone/automation for enterprises field service need.

# Requirements

1. Fundamental Needs:
   1. All the keys, text, labels should be configurable from property files
   2. Localization support
   3. Branding elements (logo, color, labels etc.) should be customizable from Admin view
   4. All the system users will get Email notification for their respective service on any change/update in the information
2. Client Application:

* Role and responsibility based user management (Tentative users: Administrators (multiple), Managers, Supervisors, Customer Executives, Field Professionals, and Customers etc.)
* UI/UX should be mobile (Android/iOS) browser compliant
* Support for user reporting hierarchy
* Use cases for customer:
  + Log/open service
  + Track status of service
  + Update comments/feedback/details on service
  + Receive email notification for any update on his/her service
* Use cases for supervisor/manager:
  + Remote sign-in, sign-out (authentication)
  + Track the assigned team members (field professionals)
  + Check the logged service
  + Allocate the service to supervisor/field professional
  + Check/Update the details on service
  + View map (real time) for all team members (field professionals)
  + Open/close the service
* Use cases for field professionals:
  + Remote sign-in, sign-out (authentication)
  + Access assigned service
  + View map for assigned service
  + Check-in and Check-out for service execution
  + Update service details
* Other users of system like Administrator, Customer Executive will follow the use cases as per service life cycle execution

1. Server side Application:

* Customizable off-the-shelf horizontal field service management solution
* Entertain complete life cycle of service from customer to field professionals
* REST web API’s for client application
* There should be provision for unified data gateway – Solution should be designed to support multiple data sources in future
* Application is able to save information captured/shared by client applications
* Server side application will be hosted on cloud
* Solution is able to offer multi-tenancy and able to run for multiple enterprises by keeping enterprise specific data in strong sandbox at server end

It is expected that team working on this case study will work with designated stakeholder(s) to gather the exact requirements for the application within couple of weeks of commencement (i.e. Sprint 0).

# Deliverables to be made

1. Solution architecture including 4+1 View.
2. Database design ER diagram.
3. The architecture should involve the industry best practices right from Planning to Modeling to Development to Testing to Rollout.
4. Document the Rollout to different environments, including production. As the solution will be hosted product, plan how to deploy incremental and patch releases
5. Code base with API documentation & unit test cases of the use cases delivered.
6. Test plan
7. Test cases for the use cases implemented.

# Technologies

**Presentation layer**

AngularJS, HTML, CSS, Bootstrap

**Service layer**

J2EE, Amazon EC2 cloud

**Database layer**

MySQL