**Requirements Model Report**

Image result for instant edge logo

**The Enterprise Transformation Platform**

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# INTRODUCTION

## Background

Instant Edge Pte Ltd is a Singapore based organization that develops an Enterprise Management Solution that aims to target SMEs and solve their many enterprise problems regarding project management. The solution is primarily based on ITIL, a popular infrastructure library that encompasses good practices for IT Enterprises. The module named “Manage Operations” will be built on top of the system and integrated with all the features already developed. It aims to set up and operate an electronic management portal for the SMEs. The scope of this project is to incorporate the functionalities outlined by “Service Portfolio Management”, “Service Catalogue Management”, “Service Level Management”, “Incident Management”, “Service Desk” and “Application Management” of ITIL into the Instant Edge solution in such a way that the processes or workflows of all modules follows ITIL. The current phase of the project mainly concentrates on identifying domain objects and their relationships from ITIL for “Incident Management” and “Manage Mobile Integration” module and developing CRUD functionality for those domain objects.

The aim of this document is to present the User Requirement Specification for modules that needs to be developed for “Manage Operations” module of Instant Edge Enterprise Management Solution under the scope of this project phase.

## Objectives

The objective of this document is to:

* Provide the basis for the development of the “Incident Management”, “Service Portfolio Management” and “Manage Mobile Integration” Module.
* Define the functional requirements for the “Incident Management”, “Service Portfolio Management” and “Manage Mobile Integration” Module.
* Define the non-functional requirements that would be necessary to support the functional requirements.
* Identify the necessary requirements that would facilitate the future modification.

## Organization

**Section 1** gives an introduction to this document.

**Section 2** presents an overview of requirements for the System.

**Section 3** presents the functional requirements of the System

**Section 4** describes the non-functional requirements of the System.

## Scope

This user requirement specification begins to define the functional requirements for the following modules

1. Service Portfolio Management
2. Incident Management
3. Manage Mobile Integration

This document also explains the non-functional requirements and the user interface requirements of Service portfolio management. This document does not explain the functional requirements of the other modules under “Manage Operations” subsystem which are not covered under the scope of this sprint.

# OVERVIEW OF REQUIREMENTS

## Introduction

Instant Edge Pte Ltd is a Singapore based tech-start up that provides SaaS solution for enterprise transformations. The solution is based primarily on ITIL, a popular infrastructure library for IT processes. The solution targets SMEs world-wide to help achieve process improvement and in the process, incorporate quality into products and services delivery. With the initiative of expanding the solution domain this project has been proposed. This project extends the functionalities of the solution to include sophisticated process management.

## System Perspective

With the intention of expanding process management across the Instant Edge platform domain and to integrate seamlessly with the existing modules, the Manage Operations module needs to be established. This module allows the Customers to manage and control the operations and processes related to it.

The solution will be utilized by Users of Customers and their own Users. They help to facilitate the business between Users and Users of Customers effectively in the area of Services, Portfolio, Catalogue, Contracts and Incidents. With this solution, the Users are able to baseline the services offered to their own Users and manage the contracts. The SLAs between them will be managed and monitored using specific KPIs for any violations or potential violations.

## System Functions

System Functions which needs to be implemented are

1. The System should allow the Users to create, edit, copy and delete Services offered by them, service level, service status, service type, service category and service class.
2. The System should allow the Users to create, edit, copy and delete Service Portfolios, Service Portfolio dimension, Service portfolio dimension type, Service portfolio dimension group, Service portfolio dimension type, Service portfolio category, Service portfolio type, Service portfolio group and Service portfolio class.
3. The System should allow the Users to create, edit, copy and delete Service Catalogues, Service Catalogue type, Service Catalogue category and Service catalogue class.
4. The System should allow the Users to create, edit, copy and delete Service Qualities, Service Quality type, Service Quality category and Service Quality class.
5. The System should allow the Users to create, edit, copy and delete Contract, Contract type, Contract category and Contract class.
6. The System should allow the Users to create, edit, copy and delete Contract catalogue and assign Contracts to it.
7. The System should allow the Users to assign Service Type, Service class and Service category to a Service.
8. The System should allow the Users to assign Services to a Service portfolio.
9. The System should allow the Users to assign Service portfolio type, Service portfolio category, Service portfolio class and a number of Service portfolio dimensions to a Service portfolio.
10. The System should allow the Users to assign Service portfolio dimension type and Service portfolio dimension category to a Service portfolio dimension.
11. The System should allow the Users to assign Services to a Service catalogue.
12. The System should allow the Users to assign Service catalogue type, Service catalogue category, Service catalogue class to a Service catalogue.
13. The System should allow the Users to assign Service quality type, Service quality category, Service quality class to a Service quality.
14. The System should allow the Users to assign Service level to a Service quality.
15. The system allows the end-user to create an incident.
16. The system allows the user to receive notification on mobile in case of any updates.
17. The System allows the user to access the instant edge platform from the mobile app.
18. The System allows the user to view the Status of the incident.
19. The System allows the user to enter the details of the incident (title, description, category, attachment, asset type, priority, geographical location).
20. The System allows the user to view the list of incidents on the dashboard.
21. The System routes the incident to appropriate destination.
22. The System allows the Resolver group to pick an incident from the queue and assign it to themselves.

## User Characteristics

The Users of the system will be the representatives of Business Entities (Customer, Customer’s Users and Instant Edge). When a User is created, he will not be assigned to a role. It will be up to the administrator or subscription manager to assign a role to the User after which, he/she will be able to use the System. The roles may be created by the Users or reused from the Master data available in the System.

# FUNCTIONAL REQUIREMENTS

This section describes the functional requirements of the Enterprise Management System. The functional requirements of Enterprise Management System are structured in terms of:

1. **Process Management Requirements** – The process management requirements of the modules implemented in this project.
2. **User interface Requirements** – The user interface requirements of the generic to the whole system and for the modules defined in this document.
3. **Data, Storage and Email Requirements** – The data, storage and email requirements generic to the whole system and for the modules defined in this document.

The processing requirements is explained for the following modules

1. Service Desk Management
2. Service portfolio Management
3. Service catalogue Management
4. Application Management
5. Service Level Management
6. Knowledge Management
7. Incident Management
8. Service Validation and Testing
9. Manage Mobile Integration

# Domain Object Model- Incident Management



**Actor**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Actor to ActorGroup  [ Direction is 'Source -> Destination'. ] |

**ActorGroup**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from ActorGroup to ActorGroupDetermination  [ Direction is 'Source -> Destination'. ] |

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Actor to ActorGroup  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

**ActorGroupDetermination**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from ActorGroupDetermination to Flowstep  [ Direction is 'Source -> Destination'. ] |

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from ActorGroup to ActorGroupDetermination  [ Direction is 'Source -> Destination'. ] |
| Aggregation from Conditions to ActorGroupDetermination  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |
| sequence : int Private  [ Is static False. Containment is Not Specified. ] |

**Conditions**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Conditions to ActorGroupDetermination  [ Direction is 'Source -> Destination'. ] |
| Aggregation from Conditions to Flow  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

**Flow**

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Conditions to Flow  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| closureDate : Date Private  [ Is static False. Containment is Not Specified. ] |
| closureDescription : String Private  [ Is static False. Containment is Not Specified. ] |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) | |
| Source: Public (Class) Flow | Target: Private currentStep (Class) Flowstep |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flow  Cardinality: [\*] | Target: Public (Class) FlowStatus  Cardinality: [1] |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flow | Target: Private parent (Class) Flow |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowmodel  Cardinality: [1] | Target: Public (Class) Flow  Cardinality: [\*] |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flow | Target: Private parent (Class) Flow |

**FlowStatus**

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flow  Cardinality: [\*] | Target: Public (Class) FlowStatus  Cardinality: [1] |

**Flowfield**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowfield to Flowfieldgroup  [ Direction is 'Source -> Destination'. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowfieldcontrol | Target: Public (Class) Flowfield |

**Flowfieldcontrol**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowfieldcontrol to Flowprocedure  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| label : String Private  [ Is static False. Containment is Not Specified. ] |
| name : String Private  [ Is static False. Containment is Not Specified. ] |
| sequence : int Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowfieldcontrol | Target: Public (Class) Flowfield |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowfieldgroup  Cardinality: [1] | Target: Public (Class) Flowfieldcontrol  Cardinality: [\*] |

**Flowfieldgroup**

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowfield to Flowfieldgroup  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |
| sequence : int Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowfieldgroup  Cardinality: [1] | Target: Public (Class) Flowfieldcontrol  Cardinality: [\*] |

**Flowitem**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowitem to Flowstep  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| comment : String Private  [ Is static False. Containment is Not Specified. ] |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowitemstatus  Cardinality: [1] | Target: Public (Class) Flowitem  Cardinality: [\*] |

**Flowitemstatus**

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowitemstatus  Cardinality: [1] | Target: Public (Class) Flowitem  Cardinality: [\*] |

**Flowmodel**

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowprocedure to Flowmodel  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowmodel  Cardinality: [1] | Target: Public (Class) Flow  Cardinality: [\*] |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowtype  Cardinality: [1] | Target: Public (Class) Flowmodel  Cardinality: [\*] |

**Flowprocedure**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowprocedure to Flowmodel  [ Direction is 'Source -> Destination'. ] |

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowfieldcontrol to Flowprocedure  [ Direction is 'Source -> Destination'. ] |
| Aggregation from Flowstep to Flowprocedure  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |
| sequence : int Private  [ Is static False. Containment is Not Specified. ] |
| status : String Private  [ Is static False. Containment is Not Specified. ] |

**Flowstep**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowstep to Flowprocedure  [ Direction is 'Source -> Destination'. ] |

| **INCOMING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from Flowitem to Flowstep  [ Direction is 'Source -> Destination'. ] |
| Aggregation from ActorGroupDetermination to Flowstep  [ Direction is 'Source -> Destination'. ] |
| Aggregation from UserAction to Flowstep  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |
| sequence : int Private  [ Is static False. Containment is Not Specified. ] |
| status : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) | |
| Source: Public (Class) Flow | Target: Private currentStep (Class) Flowstep |
| Association (direction: Source -> Destination) | |
| Source: Public (Class) UserAction  Cardinality: [1] | Target: Private destination (Class) Flowstep  Cardinality: [1..\*] |

**Flowtype**

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Unspecified) | |
| Source: Public (Class) Flowtype  Cardinality: [1] | Target: Public (Class) Flowmodel  Cardinality: [\*] |

**UserAction**

| **OUTGOING STRUCTURAL RELATIONSHIPS** |
| --- |
| Aggregation from UserAction to Flowstep  [ Direction is 'Source -> Destination'. ] |

| **ATTRIBUTES** |
| --- |
| name : String Private  [ Is static False. Containment is Not Specified. ] |

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) | |
| Source: Public (Class) UserAction  Cardinality: [1] | Target: Private destination (Class) Flowstep  Cardinality: [1..\*] |

# Domain Object Model- Push Notification



1. Class Diagram of Main Business Objects

***List of User Devices***

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) contains | |
| Source: Public (Class) List of User Devices  Cardinality: [1] | Target: Public (Class) User Device  Cardinality: [0..\*] |

***List of Users***

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) contains | |
| Source: Public (Class) List of Users  Cardinality: [0] | Target: Public (Class) User  Cardinality: [0..\*] |

***User***

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) has | |
| Source: Public (Class) User  Cardinality: [1] | Target: Public (Class) User Device  Cardinality: [0..\*] |
| Association (direction: Source -> Destination) contains | |
| Source: Public (Class) List of Users  Cardinality: [0] | Target: Public (Class) User  Cardinality: [0..\*] |

***User Device***

| **ASSOCIATIONS** | |
| --- | --- |
| Association (direction: Source -> Destination) contains | |
| Source: Public (Class) List of User Devices  Cardinality: [1] | Target: Public (Class) User Device  Cardinality: [0..\*] |
| Association (direction: Source -> Destination) has | |
| Source: Public (Class) User  Cardinality: [1] | Target: Public (Class) User Device  Cardinality: [0..\*] |