**Software Requirements**

**Specification**

**For**

**Hotel Escalation Management Module**

**Version 1.0 approved**

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**October 10, 2017**

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# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for Changes** | **Version** |
| Engel-Jan L. Pamittan | 10/09/17 | Initial Document | 1.0 |
| Samantha Nicole Balubal | 10/17/17 | Grammar Correction | 1.1 |
| Engel-Jan L. Pamittan | 10/18/17 | Adding Additional Information | 1.2 |

# Introduction

## Purpose

The team will provide Hotel Escalation Management Module for Taal Vista Hotel. This module will be able to improve their current services to their customers, monitoring unattended service requests and generating escalation reports for the executive management of the hotel. The module will provide a solution that is currently facing by the hotel, the module will deliver an escalation process included in its current complaint handling.

The escalation process of unattended service tickets in the module would allow the user to keep track of the status of the given ticket and would be able to determine the reason why a ticket escalates to the hierarchy level of the Hotel Escalation Management Module. It stores all the data needed in generating an escalation report (Initial Document ver. 1.0)

## Document Conventions

In writing this SRS, every requirement statement has its own priority to be followed and specific personnel is expected to follow a particular requirement. The document is divided into 6 parts. Introduction, Overall Description, External Interface Requirements, System Features, Other Nonfunctional Requirements, and Other Requirements chronologically.

## Intended Audience and Reading Suggestions

The team’s SRS intended readers are administrators, system developers, and management of the Taal Vista Hotel business operations.

## Product Scope

The Hotel Escalation Management Module is a proposed project for Taal Vista Hotel which handles and escalates the Service Request and Recovery System’s unattended service tickets. The purpose of this module is to help the Taal Vista Hotel lessen the number of unattended services that happen often. It aims to gather escalation data needed for generating an escalation report which the executive management will be using to be able to determine the reasons why an unattended service ticket escalates, why it takes its time in the SLA before the unattended service ticket solved and how many times it escalates.

Since Taal Vista Hotel always aims to deliver excellent services that satisfy their customers’ needs, the module would be able to help the executive management of the hotel to determine what services needs improvement for them to achieve their customers’ satisfaction.

## References

* (The Benefits And Features Of Complaints Management Software) –

<http://intoweb.com/articles/benefits_features_complaints_management_software.php>

* (The Manila Times, 2013) –

<http://www.manilatimes.net/resolving-consumer-complaints/28320/>

* Escalation Management as the Necessary Form of Incident Management Process (Peter, 2014) –

http://www.cisjournal.org/journalofcomputing/archive/vol5no8/vol5no8\_8.pdf

# Overall Description

## Product Perspective

This SRS is a portion on the whole system. This module will help the the current system, to escalate task smoothly without interference and produce a report that can view by the senior employee

## Product Functions

* The mobile application of the module will send notification to the next senior employee regarding the reassignment of escalated ticket.
* The module will be able to generate an escalation report once the executive management request

## User Classes and Characteristics

* Supervisor (Level 1) – Identified and is dealt with the employees.
* Department Manager (Level 2) – Defined and dealt by the head of the concerned management such as the General Manager.
* Resident Managers (Level 3) – Referred to and should be dealt with the Director-General or anyone equivalent in rank.
* General Manager (Level 4) – The overall in-charge on what will be dealt in the process.

## Operating Environment

The front-end operating environment of the module is an android mobile device. Android Studio and Ionic Framework will be used for developing the mobile application. For the operating environment of the back-end is a web platform and localhost will be used for developing the back-end which can be accessed by authorized personnel of the hotel.

The Hotel Escalation Management Module is only accessible in the organization and only authorized personnel can use the module.

## Design and Implementation Constraints

* The application is limited only to hotel management employees
* This application can only be used in android devices.
* Android devices are provided by the Taal Vista hotel.
* Only the senior employee can manage all the escalated tickets.
* The application needs an internet connection of the hotel management.

## User Documentation

**<List the user documentation components (such as user manuals, on-line help, and tutorials) that will be delivered along with the software. Identify any known user documentation delivery formats or standards.>**

## Assumptions and Dependencies

AS-1: Mobile devices provided by Taal Vista Hotel are compatible with the module.

AS-2: Contents of the generated escalation reports from the module are correct.

DE-1: Dependencies that were listed in the Vision and Scope Documentation should be implemented

# External Interface Requirements

## User Interfaces

The user interface for ticket administrator is he/she will be able to see all the close, open and pending escalated tickets.

The user interface for the employee(staff) is he/she will be able to view the delegated task assign to the employee.

User Interface for Ticket Administrator:

* Has a tab for Escalated Tickets
* Displays unattended service tickets that are escalated
* Displays pending, in-progress, closed escalated tickets
* Displays the priority of an escalated ticket
* Displays the ticket owner, the date and time it escalates and when it closed

User Interface for the Hierarchy Level:

* Has 2 Tabs; Assigned Tasks which pertains to the escalated tickets that are in-progress and Closed Tickets
* Displays who is assigned to a certain task
* Requires reason for escalating ticket and for re-assigning it to higher-level

## Hardware Interfaces

* Smart Phone – The smart phone should be at 2 gigabytes of RAM and 1 gigabyte free of space of internal storage. The phone should have an CPU of 1ghz of processing power to handle passing of data to the phone to the main computer and a 2000MAh battery to sustain survivability of the phone. Our application need Android KitKat (v.4.4) to run the application. This specification helps both the user and the hardware to perform better and more sufficient.
* Computer – The Computer needs to have a 4 gigabyte of RAM, a 500 gigabyte of hard drive, a g4560 CPU a b250m micro ATX for the motherboard and a generic power supply and a
* generic PC case. The said specification will help the system to run without experiencing lagging and problems on employees. This will also benefit the relationship between the smart phone and the computer on delivering important data back to the employees.
* Network – The speed of the internet should have at least a 5mbs to run our webpage and to track data within the hotel
* Server – The Server should have a 3 Terabytes of storage to store all the history of the complaint. A i3 7100 to be able to compute necessary data and comes with a 8 gigabyte of ram to help the CPU.

## Software Interfaces

The commands issued by the hotel management are all coded in java. The recommended device is android. The database used is firebase and local host.

The recommended device to operate the module is android devices because the team will use Java Language and Ionic Framework for developing the mobile application. All the user’s input such as re-assigning the ticket owner, reasons for escalating, the hierarchy level, etc. using the mobile application will be stored in firebase and local host which can be accessed by the Ticket Administrator. All the data stored in firebase will be later on generated as an Escalation Report which the executive management of Taal Vista Hotel needs.

## Communications Interfaces

Internet connection is needed to access Firebase for continuously updating the database in real-time such as updating the status of the ticket, the current owner, the time it takes before the assigned employee closed the escalated ticket. The connection for each user will be the designation of the ticket.

If the internet is down but there is a Wi-Fi signal the module will still work because it can store data from local host

# System Features

## Escalation Report

4.1.1 Description and Priority

|  |  |
| --- | --- |
| Description | Priority |
| The module will generate an escalation report which contains the unattended service tickets data that became an escalated ticket, the reasons why it escalates and how many times that an unattended service ticket escalates. | HIGH |

4.1.2 Stimulus/Response Sequences

SQ1: When the module receives an unattended service ticket, it will automatically send an updated escalated ticket details to the level 1 employee. Level 1 employee - Supervisor must update the escalation ticket status to acknowledge the escalated ticket.

SQ2: If the Level 1 Employee – Supervisor fails to acknowledge the escalated ticket or if it exceeds the given time, the module re-assigns the escalated ticket to next senior employee and will automatically notify the Level 2 employee. While the Level 1 employee is required to provide a reason why it escalates.

SQ3: The process repeats until the escalated ticket reached the Level 4 employee – General Manager or it will only stop if the escalated ticket is done.

SQ4: The module will generate an Escalation Report if the executive manager requests it.

4.1.3 Functional Requirements

REQ-1: There should be an unattended service tickets from the Service Request and Report System. These unattended service tickets will be transform into an escalated ticket.

REQ-2: The module should be able to update the details of an escalated ticket and sends it to Level 1 employee – Supervisor.

REQ-3: The module should be able to notify the next senior employee if the exceeds the pre-defined time or if the Level 1 employee – Supervisor fails to acknowledge it

REQ-4: The module should be able to generate an escalation report with correct data.

# Other Nonfunctional Requirements

## Performance Requirements

The module will notify and automatically Escalates task to the next senior employee

The module will notify and delegate work to the employees.

## Safety Requirements

Taal Vista Hotel should assign the Ticket Administrator in accessing the back-end of the module.

The Executive Manager has the right to request for an escalation report that will be generated from the module. The contents of the report can only be seen, reviewed, and analyzed by the executive manager.

IT Department is responsible for the maintenance of the module and troubleshoot, modify, etc. as long as it is related to the structure of the module.

## Security Requirements

The back-end will have a user authentication which means ticket administrator is required to have an account to access the back-end because the data stored contains confidential information which can be a risk for the Taal Vista Hotel if multiple accounts of employees are going to access the database.

## Software Quality Attributes

The module escalates all unattended tickets on the next senior employee with ease and can provide a report regarding to the ticket

## Business Rules

* Supervisor
* Has the authority to delegate the tasks
* The level 1 in hierarchy level of the Hotel Escalation Management Module
* Ticket Administrator
* Has the authority to access the back-end of the module

* IT Department
* Responsible for troubleshooting the module if it encounters a problem and ensures that it will run smoothly.

# Other Requirements

The following are other requirements that the team thinks is important for the proposed project:

* Fiber internet connection to prevent having problems in connecting to the firebase where the data are stored.

# Appendix A: Glossary

Module – a separable component, frequently one that is interchangeable with others, for assembly into units of differing size, complexity, or function.

Escalation process – refers to assigning the task to the next higher employee

Ticket – It is a detailed task for a specific work

Android – A software present on mostly all mobile devices

Android studio – A platform where the development of the application is being done

Ionic Framework – A platform that can be used to test the application

# Appendix B: Analysis Models

**<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>**

# Appendix C: To Be Determined List

**<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>**