**Software Requirements**

**Specification**

**For**

**Hotel Escalation Management Module**

**Version 1.0 approved**

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**Software Requirements Specification for Hotel Management Escalation Module**

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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 |
| Kathrine Danielle Burton | 10/23/17 | Grammar Correction | 1.3 |

# Introduction

## Purpose

The team will provide a Hotel Escalation Management Module for Taal Vista Hotel. This module will be able to improve their current services to their customers by notifying senior employees about an 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 Taal Vista Hotel minimize the number of unattended services that often occur. 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 following reasons: why an unattended service ticket takes its time in the SLA before it was 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 of the whole system. This module will help the current system to escalate task smoothly without interference and produce a report that can be viewed by the executive manager.

## Product Functions

* The module will send notification to the next senior employee regarding the reassignment of each 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 operating environment of the module is an android mobile device. Android Studio and Ionic Framework will be used for developing the mobile application.

Yii framework will be used for developing the web platform which can be only accessed by authorized personnel and the local server will be used for the repository of storing the escalation data needed.

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
* Only the senior employee will be notified about the escalated tickets.
* This application can only be used in android devices.
* Android devices are provided by the Taal Vista hotel.
* The application needs an internet connection of the hotel management.

## User Documentation

The User Manual will contain:

* Screenshots of the step-by-step process such as
* Clicking tabs that will display the assigned escalated task
* Clicking tabs that will display the closed escalated ticket
* Input reason after the ticket escalated to next senior employee
* Input for status of the escalated ticket
* Profile of the user

## 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 the web, the person who is operating will be able to see all closed, open and pending escalated tickets.

The user interface for the hierarchy level, they will be able to view the assigned task assign to them.

User Interface for the web:

* Tab for Escalated Tickets
* Displays unattended service tickets that are escalated
* Displays open, in-progress, closed escalated tickets
* Displays the priority of an escalated ticket
* Displays the senior employee who is assigned in the escalated ticket, 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 have 2 gigabytes of RAM and 1 gigabyte free of space of internal storage. The phone should have a 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 needs Android KitKat (v.4.4) to run the application. These specifications will help both the user and the hardware to perform better and more efficient.
* Computer – The Computer needs to have 4 gigabyte of RAM, 1 terabyte of storage for hard drive, g4560 CPU, b250m micro ATX for the motherboard and a generic power supply and a

generic PC case. The said specifications 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 5mbs to run our webpage and to track data within the hotel
* Server – The Server should have 3 Terabytes of storage to store all the history of escalated tickets. i3 7100 to be able to compute necessary data and comes with an 8 gigabyte of ram to help the CPU.

All the user input using computers and smartphones will be stored in local web server, the server will ensure that the data will be stored in real-time and enabling the client devices to access the data stored via local area network where the server is connected.

## 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 server. All the data stored in firebase will be later on generate 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 Wi-Fi signal, the module will still work because it can store data from localhost.

# System Features

## Escalation Report

4.1.1 Description and Priority

|  |  |
| --- | --- |
| Description | Priority |
| The module will generate an escalation report which contains the following: 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 closed.

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

4.1.3 Functional Requirements

REQ-1: There should be unattended service tickets from the Service Request and Report System. These unattended service tickets will then be transformed 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 it exceeds in the pre-defined time or if the Level 1 employee – Supervisor fails to acknowledge it.

REQ-4: The module should be able to store the time that the assigned senior employee closed the escalated ticket.

REQ-5: The module should be able to generate an escalation report with correct data.

# Other Nonfunctional Requirements

## Performance Requirements

The module notifies and automatically escalates task to the next escalation level

The module notifies the Level 1 employee about the escalated ticket

## Safety Requirements

Taal Vista Hotel should assign authorized personnel that can only access local server.

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

## Security Requirements

* User Access Control. Different users can only see the escalated tickets that are assigned to their account.

* Registered Account. Senior employee should have registered account to have an access in the module.

## Software Quality Attributes

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

## Business Rules

* Supervisor
* Has the authority to delegate the tasks
* The level 1 in hierarchy level of Hotel Escalation Management Module

# 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 – is a detailed task for a specific work

Android – is a software present on mostly all mobile devices

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

Ionic Framework – is 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.>**