Introduction to Software Engineering – COMP.SE.100

SPECIFICATION

For the Website Application For Online Sales

Smart Light system LimeHouse

Group 6

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**VERSION HISTORY**

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1. **Requirements and modeling the system**
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   1. Contents and purposes of this document

The LiMeHouse company, which produces and builds the smart lightning system based on customer requirements, has come up with the basic idea about ordering system software through its website. Hugi Oy, a consulting company, has been cooperating with LiMeHouse to write the frame story. Therefore, the purpose of this document is to be used later to invite tenders for company for system implement.

The document covers all the specifications of the website application for online sales. Inside this document, the detailed analysis of current situation, similar online ordering website, PESTE, and stakeholders can be found. The diagrams and explanations of the system model are included also with plan methods, charts, and timetables. Additionally, the document discusses about operational environment, future application and development.

This document only includes the specifications how the website application works and behaves based on customer needs. It does not contain general specifications, but the high-detailed- level requirements of choosing database, system framework.

1.2. Product, scope and environment

1.2.1 Product’s information and objectives

The product “Website Application For Online Sales” is a website handling customer orders that eases order handling for LiMeHouse company, which previously served by email and phone call, put them in a manageable database and handle the following supporting production phases, informing about orders and management processes.

The website would provide available products which offered by LiMeHouse that the customers could browse in clear UI. The information would have label of product, price, color, size and functionality of the lighting product. Then there are images of company model products that customers and have visualization about light products and lighting system based on their preferences and purposes.

The system provides ability for customer to register an account by their email. The account can be managed, activated and revised by customer’s email. Accounts include information about customers and the current carts and favorite products of the customers, followed by the GDPR compliance.

The orders are then stored into the database system which is on its own server and then handled by schedule timetable which is planned by production department of LiMeHouse company. In this case, the orders for components needed to manufacture those orders are automatically sent to LiMeHouse‘s suppliers in given time. Second, the sale planner department can easily add more products and embed images about their products. The available database also provides LiMeHouse ability to check, manage, and change orders information in case there is request handling from purchasers. The status of the order then can be updated in stages by different department of LiMeHouse and visible to purchaser on website to be tracked. The dispatch costs are finally automatically calculated and managed by financial administration. These funct

The CEO wants to be also able to pull real-time information from the system to provide needed report with templates. The system also must be compatible with company organizations that is managed and accessible for every departments on different purposes.

1.2.2 Scope

The Website application for online sales requires the existing data to operate efficiently. Aside from the online order, the LiMeHouse also preserved the traditional method of ordering. Therefore, this require the

1.2.3 Operational environment

The ordering system through web is created to work on different platforms. These include web-based, mobile operational such as iOS and Android, tablets and desktop environments. Furthermore, different environments are developed for different type of users. End users can get access to the system on both mobiles and desktop version. However, managers and other departments related can only use desktop browser.

1. **Requirement gathering plan**

2.1 Current situation

Nowadays, there is no denying the fact that lights are useful gadgets. They not only provide us with lighting but also houses’ and rooms’ decoration. These ordering data have been mostly collected through various means such as email and phone. The major benefit would be its fast and convenient since it would save an amount of time and it would simplify the stage and reduce the extra cost for multi-stages. However, there are some drawbacks since its data is currently used in real-time tracking and being implemented in production supporting phase. Therefore, there are some complains that at some time there are no email replying and answering their phone.

The website system is planned to continue collect more customers’ ordering requests and maybe automated in the future on. The data is utilized to study the habit people, hopefully to suggest the reasonably similar products, thus improving customers’ experience. On the other hand, it is expected to ease the handling’s ordering pressure from the LiMeHouse Oy.

2.2 Analyzing current documentation and similar products

Currently, there is only one documentation about the system, which is Website Application For Online Sale”, operated by Hugi Oy with the products offered by LiMeHouse firm. The frame story has drawn a brief picture about the convenient way of online and automatically ordering system including their needs, feature and some restrictions.

Based on the documentation, we have listed sine useful information about the product in previous section. Here a recall what we have written about the product:

* It allowed customer to register accounts
* Dasdadasdasbjhfbkjablfjakdnla
* dasdasda

Ordering system are available everywhere around us. It is possible to find out the ordering sales webpage which is could be the biggest competitor:

* Amazon
* Alibaba
* Lazada

2.3 PESTE

Table PESTE analysis

|  |  |
| --- | --- |
| Political | * Competition regulation * New tax policies * Laws about privacy so that tracking data is allowed |
| Economic | * Propensity of people to spend their income * Economic growth patterns * Cost of tools to protect data * Labor costs * Server maintenance costs * Reduce telecommunication-related costs |
| Social |  |
| Technological | * Access to new technology * Basic infrastructure level * Database size |
| Environmental | * Fuel shortage requires energy-saving lighting modules |