

School of Computing SRMIST, Kattankulathur 603203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	System, Functional and Non-Functional Requirements of the Project
Name of the candidate	Abdul Ahad
Team Members	Disha Yadav, Shitij Chauhan, V. Vishal
Register Number	RA2111028010094
Date of Experiment	07-02-2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	10	

Staff Signature with date

Aim

To identify the system, functional and non-functional requirements for the project.

Team Members:

S No	Register No	Name	Role
1	RA2111028010094	Abdul Ahad	Rep/ Member
2	RA2111028010080	Disha Yadav	Member
3	RA2111028010088	Shitij Chauhan	Member
4	RA2111028010089	V. Vishal	Member

Project Title: DASV LIFTERS: You dream high, we lift high

System Requirements:

1. Hardware

a. Minimum Requirement: OS: Windows 8.1 (64 Bit)

Processor: Intel Core 2 Quad CPU Q6600 @ 2.40GHz (4 CPUs)

RAM: 4GB

HDD Space: 10 GB

b. Recommended Requirement:

OS: Windows 10 (64 Bit)

Processor: Intel Core i5 3470 @ 3.2GHZ (4 CPUs)

RAM: 8GB

HDD Space: 20 GB

2. Design

Architecture: Autocad

3. Software

UI/ UX: Figma, Illustrator Coding: Python, C++

Front-end: Github, JQuery, Visual Studio Code

Back-end: MongoDb, Mysql

Functional Requirements

- The elevator needs to be able to go from one floor to another without having to stop.
- Operational zones of the elevator system must be defined as the system has multiple elevators and multiple floors. Zones are defined as a set of floors that are serviced by a particular elevator.
- Defining operational zones will help in reducing the number of stops made by the elevator when it comes to larger buildings with high number of floors.
- Minimum power consumption by the elevator system is also desired as minimum power consumption means less electricity bill.
- The elevator car can have 3 stages:
- a. Moving up.
- b. Moving down.
- c. Being idle.

Non-Functional Requirements

- Non-functional requirements described the quality of the service that the system must offer. For the elevator system, the most important non-functional requirement include performance, reliability, security and emergency handling.
- <u>Performance:</u> The elevator system must be able to handle large number of request from users and move people from one floor to another in a given time.
- Reliability: The system is said to be reliable if it is able to handle a large number of request from user so that it can perform its required functions under stated conditions for a specified period of time.
- <u>Security:</u> The data that is needed to be protected in the elevator system includes the users information and the elevators information. The data should be protected from unauthorized access.
- <u>Emergency Handling:</u> It is the ability of the system to handle emergency situation. The elevator system is said to be able to handle emergency situation if it is able to handle a critical situation like a fire or a power outage and transport all the people to the nearest exit.

Result

Thus, the requirements were identified and accordingly described.