# Software Requirements

**Specification**

For

**The Energy Hub**

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**Table of Contents Revision History**

1. **Introduction**
   1. Purpose
   2. Document Conventions
   3. Intended Audience and Reading Suggestions
   4. Product Scope
   5. References

## Overall Description

* 1. Product Perspective
  2. Product Functions
  3. User Classes and Characteristics
  4. Operating Environment
  5. Design and Implementation Constraints
  6. User Documentation
  7. Assumptions and Dependencies

## External Interface Requirements

* 1. User Interfaces
  2. Hardware Interfaces
  3. Software Interfaces
  4. Communications Interfaces

## System Features

* 1. System Feature 1
  2. System Feature 2
  3. System Feature 3

## Other Nonfunctional Requirements

* 1. Performance Requirements
  2. Safety Requirements
  3. Security Requirements
  4. Software Quality Attributes

**6. Future Scope & Conclusion**

## Introduction

* 1. **Purpose**

Gym Management System provides the benefits of streamlined operations, enhanced administration & control. Gym Management System Service is powerful, flexible and easy to use and is designed and developed to deliver real conceivable benefits to Gym Owners.

## Document Conventions

NT- New Technology

RAM - Random Access Memory. HTML- Hypertext Mark-up Languages. JSP - Java Server Pages.

CSS - Cascading Style Sheets. GHz - Gigahertz.

## Intended Audience and Reading Suggestions

* + - **Developers:** in order to be sure they are developing the right project that fulfils requirements provided in this document.
    - **Testers:** in order to have an exact list of the features and functions that has to respond according to requirements and provided diagrams.
    - **Users:** in order to get familiar with the idea of the project and suggest other features that would make it even more functional.
    - **Documentation writers:** to know what features and in what way they have to explain. What security technologies are required, how the system will response in each user’s action etc.
    - **Admin, Member, Trainers and Customers:** in order to know exactly what they have to expect from the system, right inputs and outputs and response in error situations.

## Product Scope

The **goal**  of the “**Gym Management System**” is to provide a **system** which handles the information of the people coming into the **gym** and maintaining their health care.

This project shall enable the user to add members to a gym. It is a very simple interface developed using java. The user of the system shall be able to add a new gym member. The tool shall add all the necessary details like name, contact details into the system. The system shall also monitor the timings for the member. It shall allow the user to make fee payments. This tool shall hold all the details of gym members.

## References

* + - **Websites**: Wikipedia, Google
    - **Links:** <https://www.w3schools.com/><https://www.javatpoint.com/>

## Overall Description

* 1. **Product Perspective**

This project is totally independent system that manages activities of the gym as taking registration, generating member management, trainer management ,batch management and package management.

In this project all the records are stored in single database. Different users have different permission to access this web application. Each user has unique id. User’s don’t have right to alter records and also it is not having option to alter other customer records.

## Product Functions

The system functions can be described as follows:

* + - Registration
    - Member Management
    - Trainer Management
    - Batches & Packages Management
    - Enquiry

## User Classes and Characteristics

The system will be used in the gym. Trainer, Administrators & Member will be the main users. Given the condition that not all the users are computer-literate some users may have to be trained on using the system. The system is also designed to be user-friendly. It uses a Graphical User Interface (GUI).

### Administrators:

They all have post-secondary education relating to general business administration practices. Every administrator has basic computer training. They are responsible for all of the Adding, updating and deleting different user roles.

### Trainer:

Trainer has some basic computer training. They are responsible for managing customer allocated to him. and also manages batches.

### Customer:

Customer has some basic computer knowledge. They can make enquires, do the registration view their profile details and can apply for gym membership.

## Operating Environment

This proposed software will be used in Windows platform in the version of Windows 7 or above. MySQL will be used for the database to hold the members, Trainer ,batches and packages details.

* + - Operating system: Windows platform (NT).
    - Processor: Pentium 4
    - Processor speed: 2.5 GHz
    - RAM: 512MB
    - Hard disk drive: 40GB

## Design and Implementation Constraints

The system is a web based application system running in a windows environment. The system shall be developed using J2EE and MySQL server.

A person who has no knowledge of computers will find it difficult to understand the system. But with a little knowledge it will be very easy to handle the project.

Standard compliances: This document follows IEEE standard for software requirement specification.

## User Documentation

* + - A HTML Help file with a tutorial and full help on all features provided.
    - Help pages will be providing document with screen shots.
    - If the user has more queries regarding this website then he/she can contact with the administrator through contact us page.

## Assumptions and Dependencies

It is assumed that the Gym will have enough trained staff to take care of the system and have an internet connection.

## External Interface Requirements

* 1. **User Interfaces**

The user interface is designed in Java. The developer will have to study the designing of the product. The user of the product will get very user friendly web page which will be very easy to work with.

## Hardware Interfaces

This system doesn’t require any hardware interface. The one used here is monitor, keyboard and mouse.

The system should have these hardware requirements minimum of:

* + - Processor: Intel Pentium4 1GHz or above
    - Memory: 512MB or above
    - Hard Disk Drive: 40GB or above

## Software Interfaces

* + - Operating System: Windows 7
    - Front End: JSP, BOOTSTRAP, CSS.
    - Back End: Java, Spring boot, MySQL Server.

## Communications Interfaces

Communication is done through internet and intranet mail or Telephones and Messaging.

## System Features

* 1. **System Feature 1**

The features that are available to the Admin are:

* + - Admin can Add / Delete / Update Member, Trainers ,and Batches details.
    - Admin has all rights to view the details of Gym.
    - Admin can also update gym membership packages.

## System Feature 2

The features that are available to the Trainer are:

* + - Can Add/Update/Delete Trainer Details
    - Allocate the Trainer
    - Can Add/Update/Delete Batch Details

## System Feature 3

The features that are available to the Customer/Member are:

* + - Can view profile history and details.
    - Makes enquiries and can take Gym Membership.
    - Can view Gym details and allocated trainer details

## Other Non-Functional Requirements

* 1. **Performance Requirements**

The system manages facilities required by the casual users quickly and easily. It offers to take enquiries faster through online. It takes the enquiry details from customer and sends the feedback to the particular customer.

## Safety Requirements

* + - In case the customer enters wrong Password, he or she can't get login into the system.
    - To avoid any data loss backups can be taken.
    - System identifies User and respect to their credential they get reflected to their corresponding next page.

## Security Requirements

This system is provided with authentication without which no user can pass. So only the legitimate users are allowed to use the application. If the legitimate user’s share the authentication information then the system is open to outsiders.

## Software Quality Attributes

**Reliability:** Good validations of user inputs will be done to avoid incorrect storage of records.

**Maintainability:** During the maintenance stage, SRS document can be referred for any validations.

**Portability:** This system can be easily viewed in any browser.

**Flexibility:** The system keeps on updating the data according to the transactions that takes place.

**Timeless:** The system carries out all the operations with consumption of very less time. **Security**: Security of the system is maintained d by giving access to only authenticated user id and password.

6.Future Scope & Conclusion:

* Future Scope:

This web application involves almost all recording features. The future implementation will be online help for the customer and chatting with website administrator

Also we can arrange the online gym sessions for members

* Conclusion:

The project entitled “The Energy Hub”

is developed using JSP, CSS, Bootstrap as front end and JAVA, MYSQL database in back end to computerize the process of gym management.

This project covers all storaging features required.