Date: 02/09/2023

SMART GYM

(GYM MANAGEMENT SYSTEM)

TOPIC: SYSTEM STUDY

Submitted To

Sir T J Jobin

Submitted By,

Sanila Sunny

RMCA-B

Roll no: 28

Sem-3

Date: 02/09/2023

Requirement Gathering:

During this phase, the project developer need to interact with stakeholders (users, gym owners, trainers, etc.) to gather detailed requirements such as document the functional and non-functional requirements of the project. Thus the project needs the understanding of each module and the expectations of users and the overall system. This involves:

- **Stakeholder Interviews:** Conduct interviews with representatives from each user group (admins, members, consultants, trainers, etc.) to understand their specific needs and expectations.
- **Surveys and Questionnaires:** Distribute surveys or questionnaires to collect broader feedback and requirements from a larger user base.
- **Use Case Analysis:** Identify and document various use cases that the system should support. For instance, how an admin would add a new member, how a member would book a class, etc.
- **Functional Requirements:** Specify the functionality each module should offer, such as user authentication, member registration, class scheduling, e-commerce features, etc.
- **Non-Functional Requirements:** Define the system's non-functional requirements, including performance expectations, security measures, scalability needs, and user experience considerations.

Feasibility Study:

Before proceeding further, it's essential to assess the feasibility of the project. This involves evaluating the technical, operational, and financial aspects of the proposed system:

- **Technical Feasibility:** This study evaluates whether the proposed project is technically achievable given the chosen technologies, resources, and expertise. In the context of gym management project, technical feasibility involves assessing whether the proposed technologies, such as recommendation systems, image processing, voice command integration, etc., can be effectively implemented within the project's scope and timeframe.

    1. Is the project feasible within the limits of current technology.

    ➢ YES

2. Technical issues raised during the investigation are:

➢ NOTHING

3. Can the technology be easily applied to current problems?

➢ YES

4. Does the technology have the capacity to handle the solution?

➢ YES

- **Operational Feasibility:** Operational feasibility assesses whether the project aligns with the organization's operations and whether it can be smoothly integrated into existing workflows. In the gym management project, operational feasibility involves: Evaluate how well the system aligns with the existing gym operations. Consider if the staff and users will be able to adapt to the new system smoothly.

    1. **Workflow Analysis**: Study the current gym operations and identify how the new system will impact existing processes.
    2. **User Adaptability**: Determine if gym staff and members can easily adapt to the new system and its features.
    3. **Change Management**: Plan strategies to manage the transition to the new system, including staff training and communication plans.
    4. **Scalability**: Assess how the system can accommodate growth in terms of new members, classes, and features.

- **Economic Feasibility:** The economic feasibility study focuses on determining if the project is financially viable and can provide a satisfactory return on investment. Estimate the costs associated with system development, including software, hardware, personnel, and ongoing maintenance. Compare these costs to the expected benefits and potential revenue generated by the system.

    1. **Cost Estimation**: Calculate the total costs associated with the project, including development, infrastructure, machine learning, integration, operational, and maintenance costs.
    2. **Benefit Estimation**: Estimate the potential benefits in terms of time savings, increased revenue, and enhanced user experience.