SYSTEM STUDY

INTRODUCTION

System analysis is a problem-solving technique that decomposes a system into its component pieces for the purpose of the studying how well those component parts work and interact to accomplish their purpose. In this part, the system users and developers are seen to communicate extensively for the development of the project. The system analysts act as questioners and delve deeply into the operation of current framework. The goals of the analysis is to recognize the issue, pinpoint the source of the issue, and analysis and synthesis of the numerous components leading to the solution or course of action. The process must be thoroughly studied using a variety of techniques, including requirement gathering, feasibility analysis and questionnaires. The generated data must be carefully examined to get a decision to understand how the system works. The facilities in the current system is deteriorating slowly as the technology advances. The designer is currently a problem solver and makes an effort to resolve the issues the business is facing. The remedies are given as suggestions. The proposal is then analytically compared to the current system and the user is asked to support it.

REQUIREMENT GATHERING

Requirements analysis or requirements engineering is a process used to determine the needs and expectations of a new product. It involves frequent communication with the stakeholders and end-users of the product to define expectations, resolve conflicts, and document all the key requirements. One of the greatest challenges faced by any organization is to share the vision of the final product with the customers. Hence, a business requirements analysis involves a team effort of all the key stakeholders, software developers, end-users, and customer managers to achieve a shared understanding of what the product should do. This is always done in the early phase of any project to ensure that the final product conforms to all the requirements.

The major techniques are :-

Interview

Interviewing is a common and worthwhile technique used in software requirements gathering. An interview is another form of a meeting, and, in many cases, an e-meeting is a very productive way to conduct the interview. The interviewer and interviewee can share screens and content, including other application screens, reports, mock-ups, and outlines. Active listening is important to the interview portion of requirements gathering. In order to conduct a

successful interview, the interviewer needs a high level of enthusiasm, business knowledge, and familiarity of relevant technical solutions and processes. This takes some preparation and experience so that the interview can be conducted effectively.

Questionnaire

A questionnaire or survey is a set of predetermined questions designed to elicit information about a particular topic. It's a useful method for gaining insights quickly from a large group of people. Surveys enable you to collect data from people wherever they are and are also inexpensive. Because of this, it is a widely used technique for gathering requirements.

Interview Q&A With Jayakumar (Associate at GV Raja Sports School 21/08/2022 through telephone)

- **Can the students view their progress in their academics?**

   No such facility available.

- **How attendance is recorded and monitored.?**

   Manually recorded using attendance register.

- **How is payment done?**

   Through offline mode at the time of admission.

- **How to register the students for tournaments and championships?**

   The respective coaches of the events register their students when such tournaments are held.

- **How many events are a coach assigned with?**

   Only one

- **How may a student added to a sports item?**

   Add each student to a class register.

- **How is an admission process takes place?**

   At the time of admission, the student is asked to fill out a form that gives the basic information regarding the student, following the payment section.

- **Is there any live interaction provided with the associated academy staff prior to joining the academy?**

   No such facility provided.

- **Is the check-up facility available? If so, how can a student book appointment for the occasional check-up?**
   The student is provided the facility upon request.

- **How the details of the student is updated in time?**

   Manually done by recording it in the register.

FEASIBILITY STUDY

In a feasibility study, a proposed plan or project is evaluated for its practicality. As part of a feasibility study, a project or venture is evaluated for its viability in order to determine whether it will be successful. A feasibility analysis is used to determine the viability of an idea, such as ensuring a project is legally and technically feasible as well as economically justifiable. It tells us whether a project is worth the investment—in some cases, a project may not be doable. There can be many reasons for this, including requiring too many resources, which not only prevents those resources from performing other tasks but also may cost more than an organization would earn back by taking on a project that isn't profitable. A well-designed study should offer a historical background of the business or project, such as a description of the product or service, accounting statements, details of operations and management, marketing research and policies, financial data, legal requirements, and tax obligations. Generally, such studies precede technical development and project implementation.

1. **Technical Feasibility**

This assessment focuses on the technical resources available to the organization. It helps organizations determine whether the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems. Technical feasibility also involves the evaluation of the hardware, software, and other technical requirements of the proposed system.

- **Do stakeholders have the expertise needed?**
  Yes. There is not much expertise needed to operate this system.

- **Are additional resources needed in the health system including infrastructure, skill-sets or job aids?**
  A good network connection is enough for the proper functioning of the system.

- **Is the health system ready in terms of the technology required?**
  Yes.

2. **Economic Feasibility**

This assessment typically involves a cost/ benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before

financial resources are allocated. It also serves as an independent project assessment and enhances project credibility—helping decision-makers determine the positive economic benefits to the organization that the proposed project will provide.

- **Do the resources needed exist?**
  Yes

- **Will the proposed health service or initiative lead to better use of resources to improve health outcomes, when compared with other options?**
  Yes

3. **Legal Feasibility**

This assessment investigates whether any aspect of the proposed project conflicts with legal requirements like zoning laws, data protection acts or social media laws. Let's say an organization wants to construct a new office building in a specific location. A feasibility study might reveal the organization's ideal location isn't zoned for that type of business. That organization has just saved considerable time and effort by learning that their project was not feasible right from the beginning.

- **Are rules and regulations in place to enable stakeholders to support the new service or initiative?**
  Yes

- **Does the essential political will exist?**
  Yes

- **Is there a legal framework to engage with the private sector or other key service providers?**
  Yes

4. **Operational Feasibility**

This assessment involves undertaking a study to analyse and determine whether—and how well—the organization's needs can be met by completing the project. Operational feasibility studies also examine how a project plan satisfies the requirements identified in the requirements analysis phase of system development.

- **Do existing health system procedures and protocols support the new service or initiative?**
  Yes

- **Does current mode provide end users and managers with timely, pertinent, accurate and useful formatted information?**
  Yes

5. **Scheduling Feasibility**

This assessment is the most important for project success; after all, a project will fail if not completed on time. In scheduling feasibility, an organization estimates how much time the project will take to complete.

- **What are the prerequisites before the new service or initiative can begin?**
  A good network connection, mild knowledge on how the system works

- **Is the service or initiative likely to be developed in time to be useful to the health system?**
  Yes