

Chapter One

Introduction

1.0 Introduction

Objective: Provide readers with an overview of the document and introduce the computer system project.

Content:

- Briefly describe the purpose and structure of the documentation.
- Mention the significance of the project and its relevance to the intended audience.
- Preview the key sections of the chapter.

1.1 Background Information

Objective: Establish the context and background that led to the initiation of the computer system project.

Content:

- Provide historical context or industry trends that highlight the need for the system.
- In constructing the "Background Information" section for your software development project, commence by offering a succinct introduction to the current operational environment.
- Clearly outline the existing manual processes and procedures, providing a detailed account of how operations are conducted within the current setup.
- Describe the workflow, communication channels, and any noteworthy aspects of the manual system.
- Articulate the challenges or inefficiencies faced in the current environment, without delving into gaps or solutions.
- Illuminate the specific needs and pain points experienced by stakeholders due to the manual operations.
- Conclude this section by emphasizing the necessity for a computerized system, emphasizing the potential improvements, increased efficiency, and enhanced capabilities that the proposed software aims to bring to the existing operational landscape.

- Maintain a clear and straightforward narrative, ensuring that the reader gains a comprehensive understanding of the current environment and the rationale behind the decision to implement a computer system.

1.2 Statement of the Problem

Objective: Clearly articulate the problem or challenges that the computer system aims to address.

Content:

- Define the problem statement in a clear and concise manner.
- Highlight the inadequacies or limitations of existing solutions.
- Explain the consequences or impact of the identified problem.
- In formulating the "Statement of the Problem" for your software development project, begin by defining the specific issue or challenge that the project aims to address.
- Clearly articulate the nature and scope of the problem, avoiding vague or broad statements.
- Provide relevant context to help the reader understand the significance of the problem within the given domain.
- Specify any negative consequences or impacts associated with the unresolved problem. Ensure that the problem statement is concise, focused, and directly related to the objectives of the software development project.
- Aim to create a clear and compelling narrative that sets the stage for the subsequent sections of your document, guiding the reader toward a thorough comprehension of the identified problem and its urgency for resolution.

1.3 Objectives

Objective: Specify the overall goal and measurable objectives of the computer system project.

Content:

1.3.1 General Objective

- In formulating the general objectives for a software project, the primary aim is to define the broad and overarching goals that the system seeks to accomplish.

- General objectives provide a high-level perspective, encompassing the overall purpose and desired outcomes of the software application.
- When articulating these objectives, it is essential to capture the project's fundamental aspirations without delving into specific details or functionalities.
- General objectives should be broad, concise, and align with the project's overarching mission.
- Focus on the overall improvement or transformation the software aims to bring to the targeted domain or system.
- Ensure that the general objectives set the tone for more specific objectives that follow, serving as a guiding framework for the entire project.
- It is crucial to communicate the project's broader vision, laying the foundation for subsequent detailed planning and development efforts.

1.3.2 Specific Objectives

- Enumerate detailed and measurable objectives that contribute to achieving the general objective.
- Each specific objective should address a distinct aspect of the identified problem.
- When formulating specific objectives for a software application, ensure each objective is clearly defined, measurable, and aligned with the overall project goals.
- Specify the desired functionalities, features, or improvements the software should exhibit, avoiding vague language.
- Incorporate quantifiable criteria to enable easy evaluation of success and progress.
- Define objectives in a user-centric manner, emphasizing end-user needs and satisfaction.
- Align each objective with stakeholder requirements and prioritize based on their importance to project success.
- Set realistic and achievable targets within given constraints, providing a time-bound framework for completion.
- Acknowledge interdependencies between objectives, fostering a cohesive development process.
- Document each objective comprehensively, outlining its description, success criteria, and relevant details.

- Maintain flexibility for adaptation to changing project needs and conduct regular reviews and validations with the project team and stakeholders to ensure ongoing alignment with project goals.

Suppose we were doing a software called "Bright Focus Kindergarten Examinations Management System". You could Write four objectives of the system as follows.

- (i) Automate Examination Scheduling and Coordination
- (ii) To perform Personalized Student Progress Tracking
- (iii) To Secure and Access-Controlled Examination Results
- (iv) To add, update delete examination records and generate relevant reports.

1.4 Significance and Relevance of the Project

Objective: Explain the importance of the project within the context of the field or industry.

Content:

- Discuss the potential impact of the project on users, stakeholders, or the organization.
- Highlight any innovative features or contributions that make the project relevant.
- Provide context on how the project aligns with organizational goals or industry needs.

1.5 Scope

Objective: Clearly define the boundaries and extent of the project.

Content:

- Specify the features, functionalities, and areas that the system will cover.
- Outline any planned expansions or future considerations.

1.6 Limitations

Objective: Identify the constraints and limitations inherent in the project.

Content:

- Acknowledge challenges, restrictions, or potential shortcomings.
- Discuss any areas where the system might not fully meet certain expectations.
- Be transparent about the limitations to set realistic expectations for stakeholders.

By following this structured guideline, **Chapter One** will effectively introduce readers to the background, purpose, objectives, significance, scope, and limitations of the computer system project.