

Database Design

Preparing Written Documentation



ACADEMY

Objectives

This lesson covers the following objectives:

- Compose well-organized written documentation to accompany a presentation
- Create a rough draft of, review, and finalize the written documentation.

Purpose

Written documentation is part of any professional presentation. Clients will expect it as part of the overall deliverable of any project.

Written documentation supports your oral presentation. It provides details that you cannot verbalize within the allotted time. This allows the client to review your proposed solution more closely after the presentation.

Outline for Written Documentation

Below is a suggested outline that you can follow for your written documentation. Each of the topics in the outline is described in this lesson.

- Introduction
- Business and Mission
- Information Requirements
- Business Rules
- Assumptions
- Entity Relationship Diagram

Outline for Written Documentation (cont.)

- Tables
- Conclusion
- Recommendations

Outline for Written Documentation (cont.)

Introduction

The introductory section states the business need as defined by the client. It also states the problem that currently exists as defined by the client. Finally, it describes the proposed solution that directly addresses the business need.

Outline for Written Documentation (cont.)

Business and Mission

The Business and Mission section describes the products or services offered by the business as well as its mission. What are the goals of the business? What kind of business does it want to be? How does it want to be perceived?

Outline for Written Documentation (cont.)

Information Requirements

This Information Requirements section describes, at a high level, the type of data that the business or organization would like to capture.

Business Rules

This section states the business rules as they apply to the information requirements of the company or organization.

Outline for Written Documentation (cont.)

Assumptions

This section lists and describes the assumptions that had to be considered. Assumptions are described on the next page.

What Are Assumptions?

Assumptions can be relationships or rules in the data model that you did not have time to verify. They can also be conditions that need to be true in order for the proposed solution to be successful. These may not be directly reflected in the ERD.

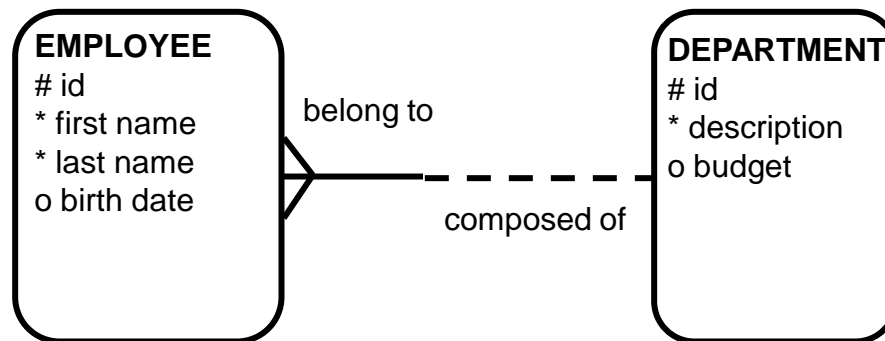
Examples of Assumptions

Examples of assumptions:

- Only one Global Fast Foods restaurant will exist. The current model does not consider a chain of restaurants.
- The manager of each Global Fast Food employee will be in charge of the shift assignment for that person.
- Customer refunds are rare and will be handled manually on a case-to-case basis.
- A food item on the promotional menu can be “converted” into a regular menu item if it becomes really popular.

Entity Relationship Diagram

The Entity Relationship Diagram section includes ERDs of the proposed solution to the business problem. Observe proper naming and drawing conventions when creating ERDs.



Tables

The Tables section includes sample tables of the primary entities. Including sample data from the business may also be helpful. The Tables section can also include SQL queries demonstrating the effectiveness of the database solution.

Conclusion

The Conclusion section summarizes how the database solution effectively meets the needs of the stakeholders and why they should hire you for the project!

Recommendations

The Recommendations section states any recommendations for further work that will benefit the stakeholders.

Documentation Example

Proposal for Overland Travel Agency

Introduction

Increased business, duplicate business functions, and delays in servicing client requests point out the need for improvements in handling client information. The addition of an easily accessible, readily updateable database would allow agents to personalize phone and email requests from repeat customers by being able to access past records from one location.

Documentation Example (cont.)

Proposal for Overland Travel Agency

Introduction (cont.)

In addition, new client information could be entered by each agent at his computer terminal, thus eliminating the backlog of data entries that now exist. Oracle Data Modeling Consultants offer the best solution for this problem. The full implementation of the database should take less than four weeks from the date of approval. All staff will be trained and using the database within that time period.

Documentation Example (cont.)

Proposal for Overland Travel Agency

Introduction (cont.)

Oracle Data Modeling Consultants can remedy the existing problem of handling client information by creating a database that agents can access from their computer terminals. Agents, while on the phone or responding to email, will be able to enter a last name and be presented with past travel agendas, travel requests, or pending travel arrangements.

Documentation Example (cont.)

Proposal for Overland Travel Agency

Introduction (cont.)

Agents will be able to add new clients and be able to generate mailing lists for advertising. Data entry will be immediate, therefore eliminating the backlog that now exists. Agents will be able to share information for group travel events and present an "any agent can" interface to the customer. This remedies the problem of clients having to speak to the same agent to have questions answered. Clients will not need to wait or be called back as is presently done.

Documentation Example (cont.)

Business and Mission

Overland Travel Agency is a small but growing company that specializes in personal travel arrangements for business and individuals. The mission of the company is to provide personalized service to any client from all of Overland's agents. Overland strives to create a friendly "one-stop" place for clients to make travel arrangements. Overland wants to appear "fresh and up-to-date." They strive to inform clients about new and exciting travel deals and adventures.

Documentation Example (cont.)

Information Requirements

Overland Travel needs up-to-date client information, including business and home addresses, last name and first name, past travel arrangements, future travel plans, and client-preferred modes of travel. They also need travel particulars such as handicap accommodations, special meals required, where tickets are billed and delivered, persons who regularly accompany them traveling, and other information pertinent to the customer. Client families or groups must be able to be identified both as a group and as individuals.

Documentation Example (cont.)

Business Rules

At Overland Travel, each travel agent should be able to assist any customer who calls on the phone or sends an email without having to leave his desk. A customer may be referred to as a client. A customer is anyone who has made a request for travel but may or may not have actually booked a reservation. Agents do not work on a commission basis, so access to client information is shared by all agents. Agents should be able to enter and store comments related to each client as needed.

Documentation Example (cont.)

Assumptions

Clients are aware that the information they provide will be shared with all agents, and they are agreeable to this. Clients are willing to work with different agents on their travel plans. They may request a “preferred agent,” but are willing to talk with someone else if that person is not available.

Past data will be entered into the database to provide a “history” for clients who have previously done business with Overland Travel.

Summary

In this lesson, you should have learned how to:

- Compose well-organized written documentation to accompany a presentation
- Create a rough draft of, review, and finalize the written documentation.