

The logo for Oracle Academy. The word "ORACLE" is in a bold, orange, sans-serif font. Below it, the word "Academy" is in a smaller, dark gray, sans-serif font. The entire logo is centered on a light gray background, which is framed by dark gray horizontal bars at the top and bottom.

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Database Design

11-2

Preparing Written Documentation

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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



Your interview notes are a good source for the business need and problem as stated by the customer. It is the job of the consultant to find out how a database system can address the customer's business requirements.

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
 - Entity Relationship Diagram
 - Tables
 - Conclusion
 - Recommendations



Outline for Written Documentation

- 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

- 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

- 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
- 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

The data modeler should try to keep assumptions to a minimum, and therefore should try to get all the answers to his/her questions. However, this is not always possible, so assumptions will need to be documented.

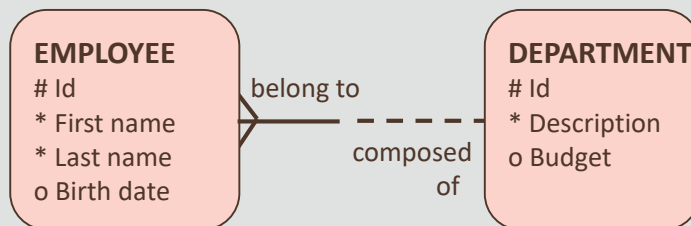
Examples of Assumptions

- Examples of 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

Students should try to come up with at least one assumption for their project.

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



Remember to use soft-boxes for entities, writing relationship names on both sides of the relationship line, leaving enough white space, etc.

Tables

- The Tables section includes sample tables of the primary entities
- Including sample data from the business may also be helpful
- Using the table instance charts will help catch mapping errors or problems before the tables are created in the database

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
- Example recommendations:
 - Expansion to global markets (translation, currency conversion, connecting multiple databases, etc.)
 - Integration with existing systems
 - Creating online self-service systems for customers
 - Creating a separate historical database (data warehouse) for trend analysis

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

- Proposal for Overland Travel Agency

- Introduction

- 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

- Proposal for Overland Travel Agency
- Introduction
 - 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

- Proposal for Overland Travel Agency
- Introduction
 - 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

Documentation Example

- Proposal for Overland Travel Agency
- Introduction
 - 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

- Proposal for Overland Travel Agency
- 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

Documentation Example

- Proposal for Overland Travel Agency
- Business and Mission
 - Overland wants to appear "fresh and up-to-date"
 - They strive to inform clients about new and exciting travel deals and adventures

Documentation Example

- Proposal for Overland Travel Agency
- 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

- Proposal for Overland Travel Agency
- 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

Documentation Example

- Proposal for Overland Travel Agency
- Business Rules
 - 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

- Proposal for Overland Travel Agency
- 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

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