

“Creating an app for the Out of Office solution”, SQL Model Solution

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This document will provide the diagrams that represent the SQL database tables. The entity-relationship and relational models were carried out.

The figure below shows the initial modeling of the database (Entity-Relationship):

Entity - Relationship Model

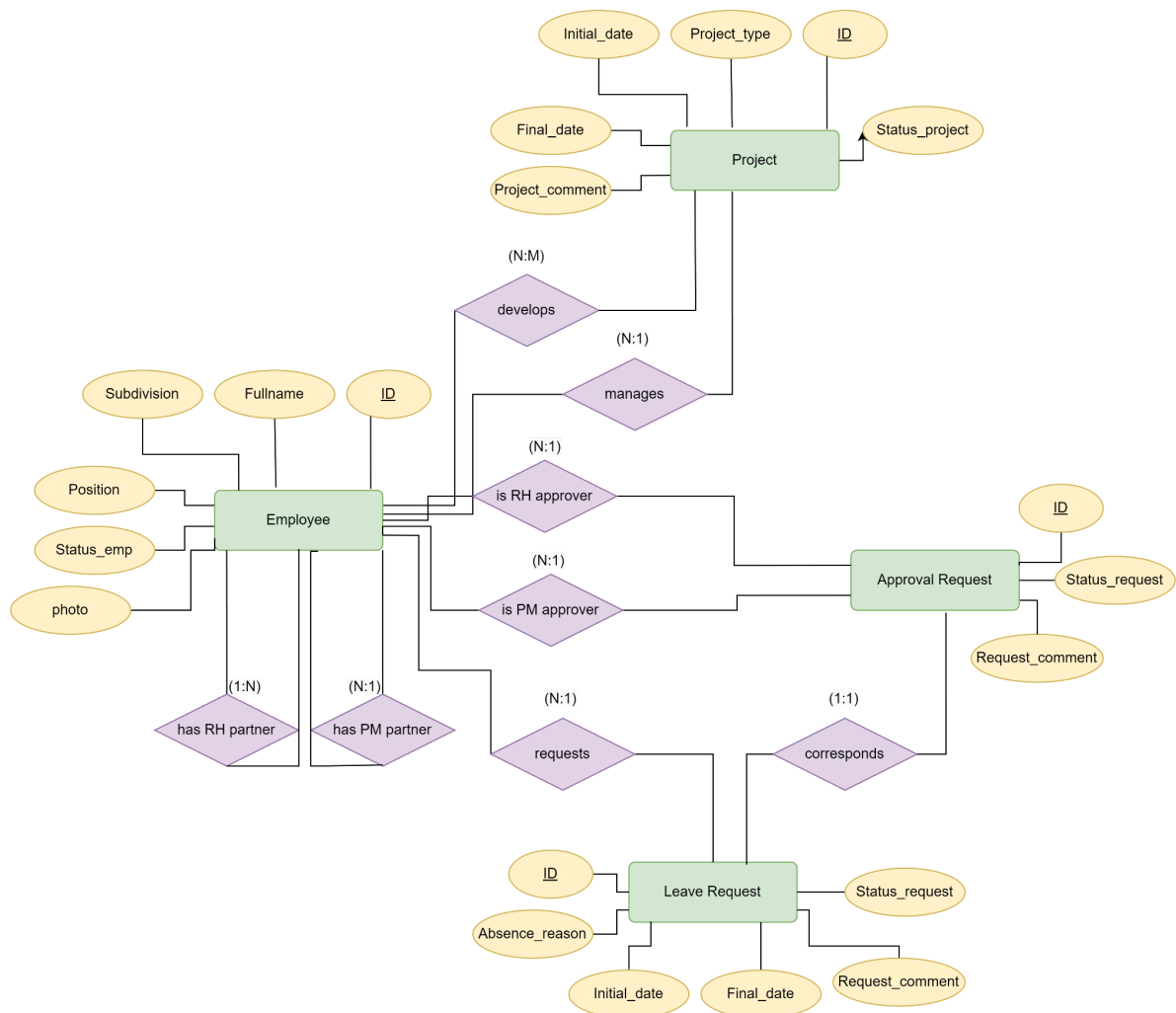


Figure 1. Database Model with Entity - Relationship Model.

As we can see, each element in the diagram has a color, so we notice that we have the following:

- Entities:
 - Employee.
 - Project.
 - Leave request.
 - Approval request.

- Attributes:
 - Employee:
ID (Key), Fullname, Position, Status_emp, Photo.
 - Project:
ID (Key), Project_type, Initial_date, Final_date, Project_comment, Status_project.
 - Leave request:
ID (Key), Absence reason, Initial_date, Final_date, Request_comment, Status_request.
 - Approval request:
ID (Key), Request_comment, Status_request.
- Relationships:
 - Employee - Employee:
Has RH partner (many employees, only one RH partner), Has PM partner (many employees, only one PM partner).
 - Employee - Project:
Develops (many employees, many projects), Manage (an employee can manage many projects, only one employee manages each).
 - Employee - Leave request:
Requests (an employee can request many leave requests, a leave request is made by only one employee).
 - Employee - Approval request:
Is RH approval (an employee can be the RH approval of many requests, a request has only one RH approval), Is PM approval (an employee can be the PM approval of many requests, a request has only one PM approval).
 - Leave request - Approval request:
Corresponds (a leave request corresponds with an approval request, and vice versa).

After making the Entity - Relationship Model, it is translated into a Relational Model Schema.

In the next page, the corresponding diagram is shown.

Relational Model

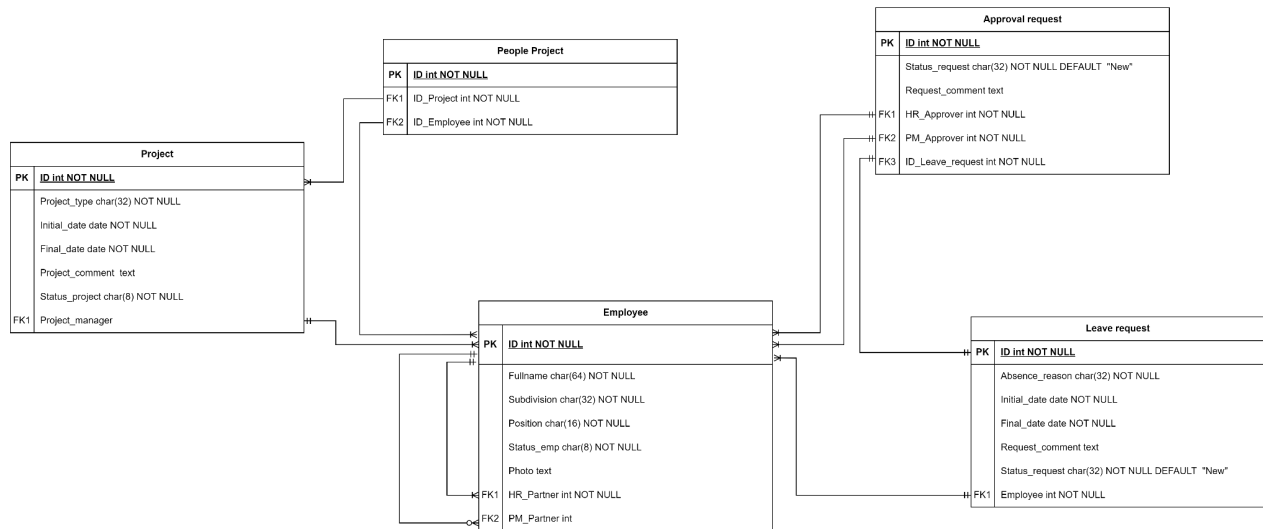


Figure 2. Database Model with Relational Model.

While making this model, relationships were transformed in references to the corresponding tables and new tables. Relations with cardinality 1:N were translated as references, and relations with cardinality N:M were translated as a new table or entity in SQL.

With this document is a draw.io file containing the diagrams. To see them better, review that file.