

# Payroll Management System for Trimeca S.A Company

Adiel Valentin Hernandez, Nicolás Guevara Herrán, School of Systems Engineering  
Universidad Distrital Francisco José de Caldas, Bogotá, Colombia



UNIVERSIDAD DISTRITAL  
FRANCISCO JOSÉ DE CALDAS

## INTRODUCTION

Company Trimeca S.A has raised the need for monetary compensation for the hours not given to employees though monetary payments corresponding to individual salary assignments. Adding into it, the company is in need to organize each employees' allowances, since they are not certain how are these allowances being managed, as well as the employees' deductions.

## GOAL

For this first phase, in order to get the solution of the problem given before, we need to design a database that can handle and organize all the information needed

## ABOUT TRIMECA S.A



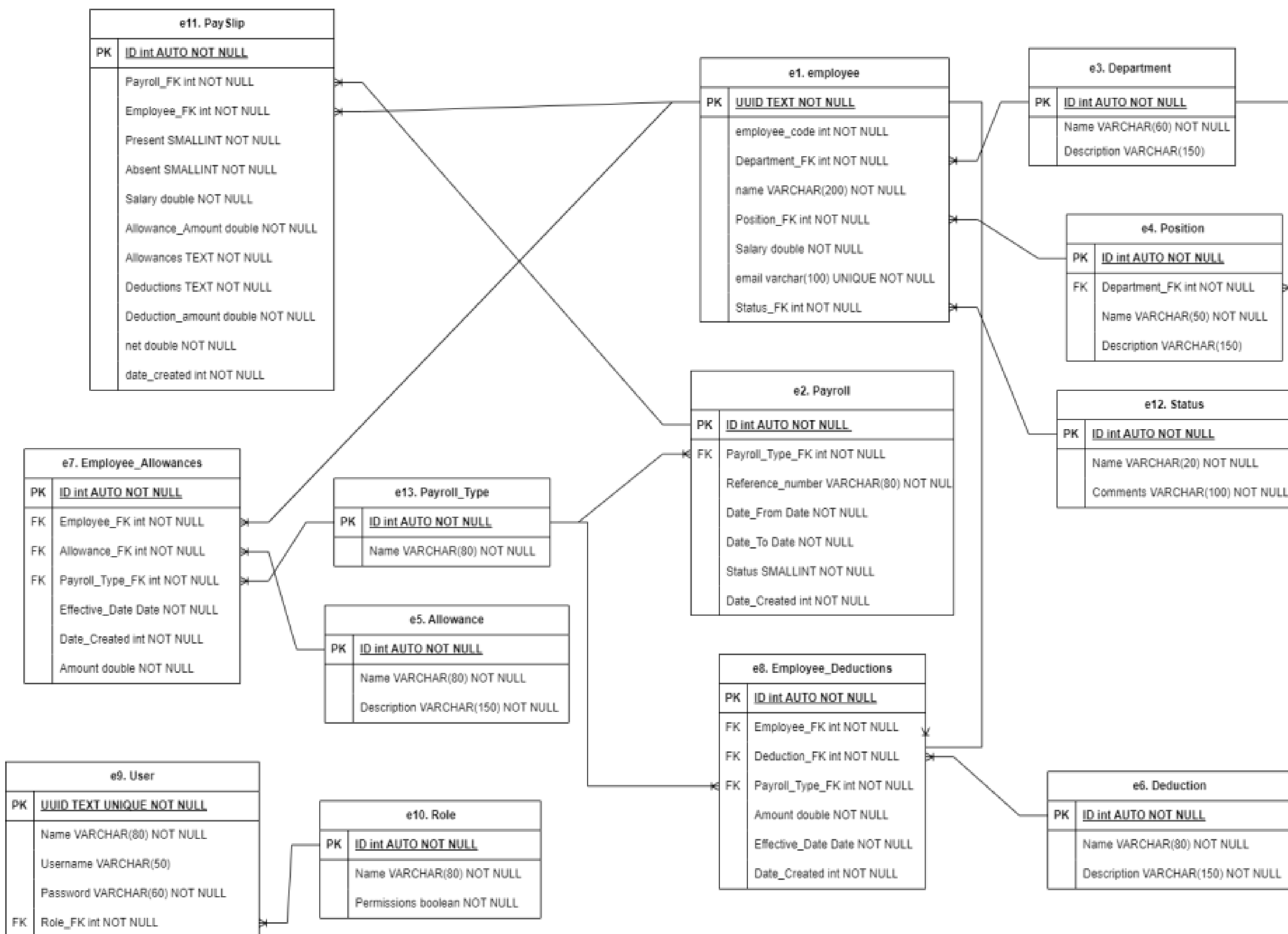
Kick Off Meeting  
Trabajos Industriales y Mecánicos C.A.  
Sucursal Barranquilla  
2020

Ecopetrol S.A.  
Contrato Marco # 3023402 - HUB Caribe  
"Construcción de Obras Civiles, Eléctricas, Mecánicas e Instrumentación Requeridas por Ecopetrol y su Grupo Empresarial, para el HUB Caribe"

Contrato 3023402-CA-02  
"Sistema Contraincendios GLP Refinería de Cartagena"

## RESULTS

We managed to design an ERM which consists of 14 entities.



## TECHNICAL OBSERVATIONS

- We decided to make the ID from Users and Employees an UUID, in order to make it safer.
- In some places, we decided to use SMALLINT variable type.
- Since the salary may change between employees at the same position, we decided to make it an attribute of employees' table.