Business template: Recruitment Agency

CONTENTS:

1.	BUSINESS DESCRIPTION	2
	1.1 Business background	2
	1.2 Problems. Current Situation	2
	1.3 Benefits from implementing a database. Project Vision	3
2.	MODEL DESCRIPTION	4
	2.1 Definitions & Acronyms	4
	2.2 Logical Scheme	6
	2.3 Ohiects	7

1. BUSINESS DESCRIPTION

1.1 Business background:

Recruitment agency is a professional staffing agency that specializes in delivering personalized recruitment solutions to businesses across various industries. Our expert recruiters provide targeted staffing solutions for all roles, from executive to entry-level positions. Whether you need temporary staffing solutions or direct-hire recruitment, we have the expertise to help you build a successful team. Contact us today to learn more.

1.2 Problems. Current Situation:

Candidate Shortage: In a competitive job market, finding qualified candidates for open positions can be challenging. Recruitment agencies may struggle to attract and retain top talent, particularly for specialized roles or in industries with high demand for certain skills.

Client Demands: Clients may have high expectations for the quality and speed of candidate delivery, which can put pressure on the recruitment agency to perform. Balancing client demands with the need to source and screen quality candidates can be a delicate balance.

Economic Conditions: Economic conditions, such as a recession or job market instability, can impact the recruitment industry. Clients may have fewer job openings to fill, which can impact the agency's revenue and ability to operate.

Technology Changes: Recruitment agencies must stay up-to-date with the latest technology to remain competitive. Failure to adopt new tools and techniques can put them at a disadvantage and impact their ability to attract clients and candidates.

Legal Compliance: Recruitment agencies must comply with a range of legal regulations, such as anti-discrimination laws and data privacy regulations. Failure to comply with these regulations can result in legal action, loss of business, and reputational damage.

1.3 Benefits from implementing a database. Project Vision:

Improved Efficiency: With a database system, recruiters can easily store, organize, and search for candidate information, which can save time and improve overall efficiency. This can allow recruiters to focus on higher-value tasks, such as building relationships with clients and candidates.

Enhanced Candidate Screening: A database system can allow recruiters to easily screen and filter candidates based on specific criteria, such as job experience, education, and skills. This can help to ensure that only the most qualified candidates are presented to clients, which can improve client satisfaction and increase the likelihood of successful placements.

Increased Candidate Engagement: With a database system, recruiters can easily track candidate communication and engagement, including email correspondence, phone calls, and interviews. This can help to build stronger relationships with candidates and improve the candidate experience, which can help to attract and retain top talent.

Data Analytics: A database system can provide recruiters with valuable insights and data analytics, such as candidate sourcing, recruitment metrics, and placement success rates. This can help recruiters to identify trends and areas for improvement, which can lead to better recruitment strategies and more successful placements.

Scalability: A database system can provide a scalable solution for managing candidate and client information, allowing recruitment agencies to grow and expand their business without having to worry about storage and organization issues. This can help to improve operational efficiency and reduce overhead costs.

2. MODEL DESCRIPTION

2.1 Definitions:

Customer - The customers of a recruitment agency are businesses or organizations that are seeking to fill open positions with qualified candidates, as well as existing clients who are working with the agency to provide ongoing staffing solutions.

Worker - A worker hired within an agency for a customer is a job candidate who has been placed in a temporary or permanent position by the recruitment agency, and is contracted to work for the customer business or organization.

Position - A position is a specific job opening that a customer business or organization is seeking to fill through a recruitment agency. The agency works to identify qualified candidates for the position and presents a shortlist of potential hires to the customer for consideration. Once a candidate is selected, the agency assists in the onboarding process and may provide ongoing support to ensure a successful placement.

Requirements - Job requirements are the skills, experience, education, and other qualifications that a candidate must possess in order to be considered for a particular position. A recruitment agency works with the customer business or organization to determine the job requirements for each position and uses this information to identify and screen potential candidates. The agency may also provide guidance to the customer on how to refine or adjust job requirements in order to attract a larger pool of qualified candidates.

Skill - A skill is a specific ability or proficiency that a candidate possesses and that is relevant to a particular position.

Education - The highest level of worker education with a major.

Branch - An agency branch is a physical location of a recruitment agency that operates in a specific geographic area.

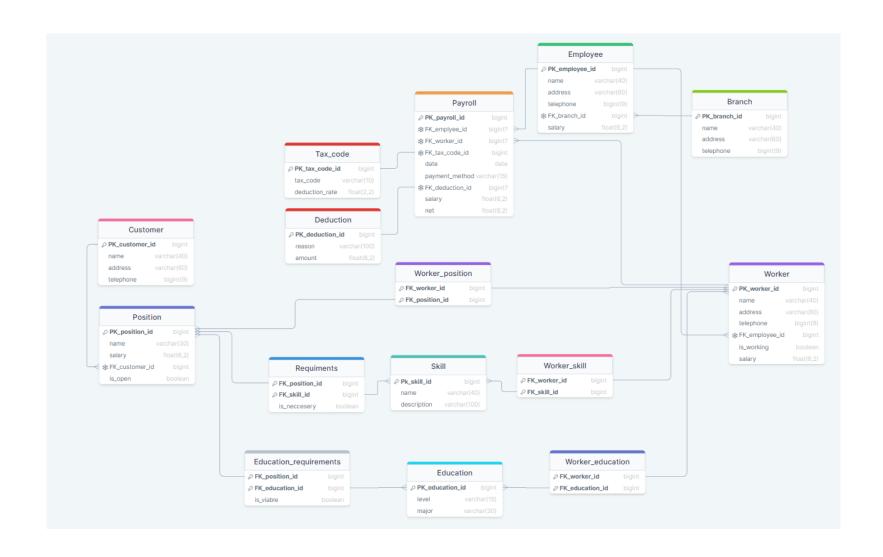
Employee - Person hired directly by employment agency. To perform the job in agency.

Payroll - Payroll involves managing payments to placed workers and employees, including taxes and deductions.

Tax_code - A tax code is a unique set of numbers and letters used by employers and payroll providers to calculate the amount of tax to be deducted from an employee's earnings.

Deduction - Any other deductions from salary.

2.2 Logical Scheme



2.3 Objects

Customer: Customers of agency.

Customer	PK_customer_id	Key for customer table	Integer
	name	Name of customer	text
	address	Address of customer	text
	telephone	Telephone to the customer	Integer(9)

Example:

Customer	0	Company ABC	Fictional street 34, 34-155 Fictional city, Country	123456789
	1	ZKH Holding	Fictional street 324, 14-155 Fictional city, Country	234567890

Customer table is connected with one - many relation with position table. Since one customer can have multiple open positions.

Position: Table related to open and filled positions.

Position	PK_position_id	Key for position table	Integer
	name	Name of a position	Text
	salary	monthly salary for given position	float(6,2)
	FK_customer_id	ID of customer who posted position	integer
	is_open	Is there a worker already sign for a position	boolean

Example:

Position	0	Data Engineer	3000	0	True
	1	Data Analyst	2800	0	False

Position table have three many - many relationships through bridge tables:

- with worker through worker position, since one worker could have few positions, and sometimes we will need few workers for a certain position.

- with skill through requirements and with education through education requirements for same reason.

Requirements: Bridge table for job skill requirements.

The primary key for this table is a combination of $FK_position_id$ and FK_skill_id .

Requirements	FK_position_id	ID for position	integer
	FK_skill_id	ID for skill	integer
	is_neccesary	Information if skill is necessary for given position	boolean

Example:

Requirements	1	1	True
	1	2	True
	13	4	False

Education Requirements: Bridge table for job educational requirements.

The primary key for this table is a combination of FK_position_id and FK_education_id.

Education_requirements	FK_position_id	ID for position	integer
	FK_educationl_id	ID for education	integer
	is_viable	Information if education is viable for given position	boolean

Example:

Education_requirements	1	1	True
	1	2	True
	13	4	False

Worker position: Bridge table used for storing positions for workers.

The primary key for this table is a combination of FK_worker_id and FK_position_id.

Worker_position	FK_worker_id	ID for worker	integer
	FK_position_id	ID for position	integer

Example:

Worker_position	1	1
	1	2
	13	4

Skill Table and Education table are also connected with Worker table through bridge tables to store information about worker's skills and education.

Worker skill: Bridge table used for storing skills of workers.

The primary key for this table is a combination of FK_worker_id and FK_skill_id.

Worker_skill	FK_worker_id	ID for worker	integer
	FK_skill_id	ID for skill	integer

Example:

Worker_skill	1	1
	1	2
	13	4

Worker education: Bridge table used for storing education of workers.

The primary key for this table is a combination of FK_worker_id and FK_education_id.

Worker_education	FK_worker_id	ID for worker	integer
	FK_education_id	ID for education	integer

Example:

Worker_education	1	1
	1	2
	13	4

Skill: Table of possible skills with descriptions.

Skill	PK_skill_id	Key for skill	integer	
	name	Name of a skill	text	
description		Description of a skill	text	

Example:

Skill	0	Python	Knowledge of python language	
	1	Data Analysis	Knowledge of data analysis	
	2	HTML	Knowledge of HTML language	

Education: Table of possible skills with descriptions.

Education	PK_educationl_id	Key for education	integer
level		Level of education	text
	major	Major subject	text

Example:

Education	0	Bachelor	Computer Science
	1	Master	Computer Science
	2	Doctor	Computer Science

Worker: Table used for storing information about workers (peoples hired by agency to work for external customers).

Worker	PK_worker_id	Key for worker table	integer
	name	Full name of worker	text
	address	Address of a worker	text
	telephone	Telephone to a worker	integer(9)
	FK_employee_id	ID of employee of agency assigned to take care of particular worker	integer
	is_working	Boolean information if worker performing work at the moment	bool
	salary	Total monthly gross salary of worker	float

Worker	0	Henry Ford	Fictional street 34, 34-155 Fictional city, Country	789456123	111	True	5215.25
	1	Adam Smith	Fictional street 34, 34-155 Fictional city, Country	789123456	111	False	0

Worker table is connected furthermore with many-to-one relationship with Employee table, since one employee of agency could manage multiple workers and also connected with one-to-many relationship with payroll table since each worker gets paycheck every month.

Employee: Table used for storing information about employees of agency.

Employee	PK_employee_id	A key for employee table	integer
	name	Name of employee	text
	address	Address of employee	text
	telephone	Telephone to employee	integer(9)
	FK_branch_id	A key for a branch employee is working in	integer
	salary	Gross monthly salary of an employee	float

Employee	1	Adam Wesley	Fictional street 34, 34-155 Fictional city, Country	789456123	13	6265.00
	2	Michel Scoot	Fictional street 344 34-155 Fictional city, Country	789456123	1	2777.85

Employee table is connected furthermore with branch table with many-to-one relationship since many employees can work in the same branch as well as with payroll table.

Branch: Table used for storing information about branch.

Branch	PK_branch_id	A key for branch	integer
	name	Name of a branch	text
	address	Address of a branch	text
	telephone	Telephone to a branch	integer(9)

Branch	13	Warsaw Branch	Owocowa 13, 34-244 Warsaw, Poland	888999777
	14	London Branch	Kings Street 1, 101020 London, Poland	111222333

Payroll: Table used for storing information about monthly pay-checks for workers and employees.

Payroll	Pk_payroll_id	A key for payroll table	integer
	FK_employee_id	A key for employee table	integer or null
	FK_worker_id	A key for worker table	integer or null
	FK_tax_code	A key for tax code table	integer
	date	A date of pay check	date
	FK_deduction_id	A key for deduction table	integer or null
	salary	salary of an employee or a worker	float
	net	Net salary of employee	float

Payroll	12	12	Null	1	2023-02-28	null	5600,00	4300,24
	13	Null	199	4	2023-02-28	1	6200.00	4566,11

Payroll table is also connected with tax code table and deduction table to determine net salary of employee or a worker.

Tax code: Table used for storing tax_codes.

Tax_code	PK_tax_code_id	A key for tax_code table	integer
	tax_code	Tax code	text
	deduction_rate	Tax rate	float

Tax_code	1	L-0001	0,19
	2	BR-245	0,45

Deduction: Table used for storing any other deductions like vacation etc.

Deduction	PK_deduction_id	A key for Deduction table	integer
	reason	Reason of deduction	text
	amount	Sum that will be deducted from salary	float

Deduction	1	Fine	100,00
	2	Holiday	150,00