

Milestone 1

Feb 10, 2025

Project Group Number on Canvas: ‘Group 41’

Name	Student ID	CS Alias	Preferred Email Address
Vincent Luong	73547515	v8c0o	vincentluong1@hotmail.com
Ahmed Khan	31684178	h6v1y	ahmeddx400@gmail.com
Zain Ali	94391034	k9y0h	szainali284@gmail.com

By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

CPSC 304 Introduction to Relational Databases
The University of British Columbia

1 Project Description

What is the domain of the application?

The domain of our database is to capture the relationships present in a prison database management system. This includes tracking prison conditions, prisoner details, and the internal logistics of the facility. The primary function of our database is to assist in the efficient management of a correctional facility's daily operations.. Additionally, the database will assign specific sections of the prison to individual workers, detailing the areas they oversee and the prisoners residing within them.

What aspects of the domain are modeled by the database?

The database of our prison database management system will model key entities such as employees, the prison facility, employees, sentences, and prisoners, along with their relationships. Furthermore, The database will model the relationships between the including entities, including: Work area, sentencing, prisoner information, and inventory.

2 Database Specifications

What benefits does the database provide to the application?

Prison operational managers can efficiently and accurately view the information on prisoners, and workers. This includes their unique identifiers and additional medical/personal information that could be useful. If a prisoner commits another crime within the prison, an additional sentence could be imposed and workers are assigned to specific areas.

What functionality will the database provide?

The database will manage prisoner intake by assigning each new inmate a cell number and a guard. It will also handle the onboarding of new workers, categorizing them into roles such as guard, maintenance, chef, or medical. Additionally, the system will support updates to prisoner sentences, allowing modifications when necessary, and will enable worker reassignment, ensuring staff can be relocated to different areas within the prison as needed.

3 Application Platform

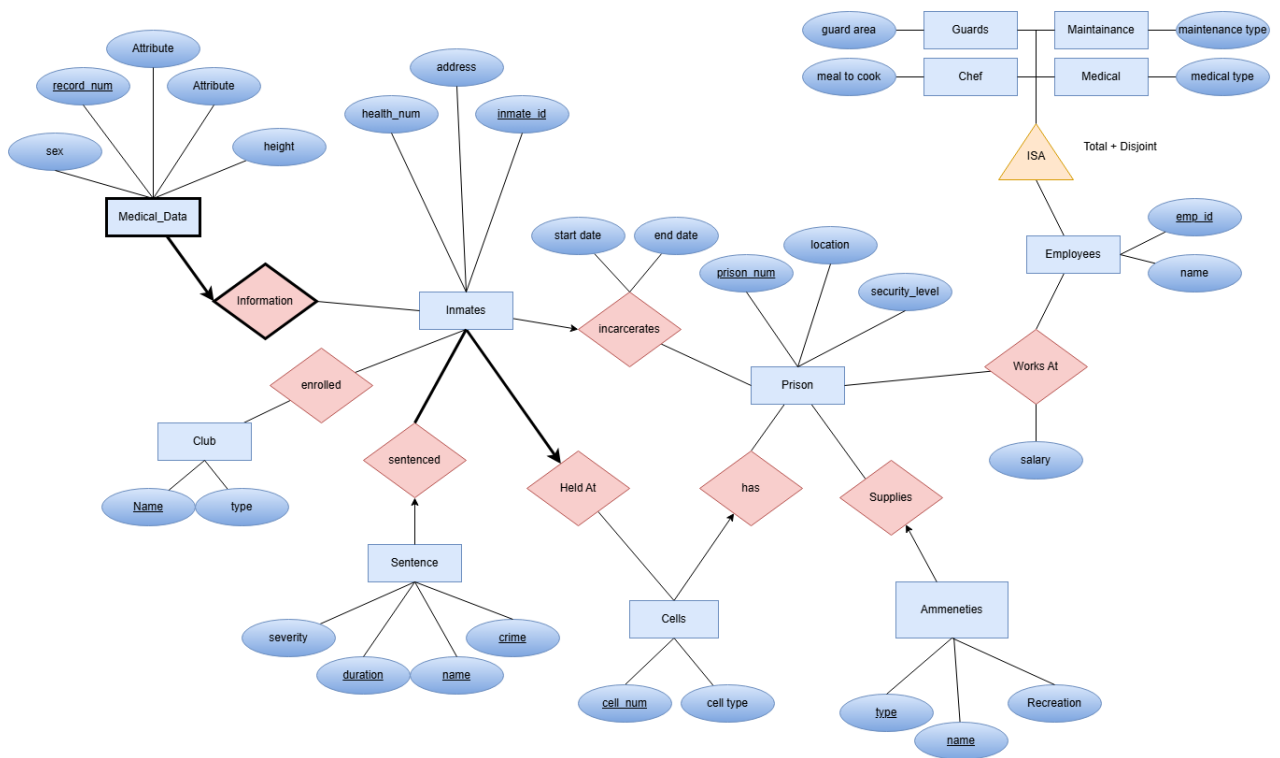
What platform will your project use?

What is your expected application technology stack?

Our project will consist of React and Next.js for our frontend, with JavaScript powering the backend.

For database management, we will utilize SQL Plus/Oracle* to handle data storage and retrieval. Additionally, we will use GitHub and Git for version control and team collaboration, ensuring efficient development and code management.

4 E/R Diagram



5 Additional Comments

No additional comments here.

6 AI Declaration

Yes, AI (ChatGPT) has been used to grammar check and retype the following:

"what aspect of the domain are modeled by the database".

We gave it our previous answer: The database of our prison database management system will model the entities that include employees, prison, inventory, crime, and prisoners. In addition, we will model the relationships between the entities: worksAt (which worker works where, sentenced (the sentence duration), heldAt (the cell where the prisoner is held). Everything else was written by us.