**Proposal Template:**

**Project Participants:**

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**Title:**

Infectious Diseases – Contact Tracing Interface

**Executive Summary:**

This is where you will describe what your project is intended to do. Remember, this project should be completed in 2 weeks time. If you can’t explain it in 1-2 paragraphs, you may need to scale it back so you can complete your initial features on time.

**Initial Features:**

Create a bulleted list of planned features you plan to have completed in your project by the deadline. This should include a list of API endpoints for each feature. If you are working in a group, please note which team member will be assigned to each feature.

Example of list of Features/Endpoints for a Library API:

* Entities: Users, Administration, Books, Genre, Checkout, BookReviews, etc.
* A User can perform the following operations:
  + Login, and use system
  + Browse all Books (GET on Books)
  + Browse Books by genre (GET on Books with genre specified)
  + View all details about a specific Book (GET on Books by primary key)
  + Leave review on a Book (POST in BookReviews)
  + Read reviews on a Book (GET on BookReviews)
  + Checkout X amount of books at a time (POST in Checkout), set dueDate for 2 weeks from today (e.g. Checkout Date) and (PUT Change Status of Book to Unavailable)
  + Return a Book (PUT Change Status of Book to Available, PUT Checkout to RETURNED status, POST Fee on Users, by primary key, if the book is past due, etc.)

**Stretch Goals (to be completed if time allows, or after graduation):**

Create a bulleted list of planned features you plan to have once you have completed your initial features. These should be features that may require more research in how to implement or features that would take longer than the allotted time frame.

**Brainstorm**

Public Health interface, for tracking cases of infectious diseases like COVID, MonkeyPox, etc.

Table of Variants:

* Index (Autogenerate) [PK]
* Variant Code
* Disease Name
* Infectious Time Range (days)

Table of Tests:

* Index (Autogenerate) [PK]
* Test Name
* Variant [FK]
* Valid Exposure Time Range Min (days)
* Valid Exposure Time Range Max (days)

Table of Cases:

* Index (Autogenerate) [PK]
* Variant Identified [FK]
* Date Detected
* Date of Exposure (if known)
* Location of Exposure (if known)
* Test Method [FK]
* Patient ID [FK]
* Notes

?Use Views for protected PII information?

Table of Individuals:

* ID Number
* Patient Name
* Patient Date of Birth
* Patient Phone
* Patient Home Address

Table of Exposures / Contact Tracing:

* Index (Autogenerate) [PK]
* Case Number [FK]
* Date
* Location
* Contact (who did primary individual come in contact with?)
* Notes

### Allow User To:

Add Case Details – Returns Case Number and Confirmation message

Add Patient – returns Patient Number on Confirmation

Add Contacts – returns Contact id

View Contacts – input case number

View Cases – input Patient Number

### Stretch Goals:

Table of Authorized Users:

* Access Key
* Access Level
* Per Table Access Level?
* Name

Table of Database Transactions:

* Index (Autogenerate)[PK]
* Date
* Access Key
* Valid – T/F
* Operation Log

Contact Tracing SQL puzzle – find patient Zero. Prepare sample data set, and additional tables like Interview Responses, and Actual Infections that can be used to act the role of a Contact Tracer and find patient Zero.