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1.0 Preliminary Design Document———

Outline of Software Development Plan

1.1   Project Description

This Preliminary Design Document provides the details of the projected development for the **Case Database** for CaseX, an interactive web application and scalable database solution optimized for the management of physical data. The Case Database will be implemented in MongoDB, using Mongoose as a object relational model tool for Node.js. The potential users will be users of the CaseX web application, which will provide a web front-end for this database.

The full database for CaseX consists of the **Case Database** and the **User Database.** The User Database will be developed by Carleen Petrosian and Andrea Carver, and is outlined in their preliminary design document. This group will also develop the Victim, Suspect, and Address entities of the **Case Database.**

1.2 Data Description

The data that will be stored in the Case Database will be the basic data related to each case: the division that is investigating it; the bureau whose jurisdiction it resides in; the DR number for the case, victim(s), and master DR; notes regarding the case; the dates the crime occurred and was reported; the district it was reported in; the status of the case and the date the status was updated; its solvability factor; the address at which it took place; the weapon and/or method used; the motive; and the dates the case data was last modified and who it was modified by.

Case Database ——

Attribute name	Data type	Can be NULL	Can be multivalued
Division	Dropdown	No	No
Bureau	Dropdown	No	No
DR Number	Number	No	No
Victim DR	Number	No	No
Master DR	Number	No	No
Notes	Text	No	No
Date Occurred	Date	No	No
Date Reported	Date	No	No
Reporting District	Number	No	No
Case Status	Dropdown	No	Yes
Case Status Date	Date	No	No
Solvability Factor	Dropdown	No	No
Crime Address	Address	No	No
Weapon/Method Used	Dropdown	No	No
Motive	Dropdown	No	No
Last Modified Date	Date	No	No
Last Modified By	User	No	No

1.3 Examples

1. Get 50 most recently created cases involving male victims aged 20-30.
2. Get 50 most recently created cases involving a 9-mm pistol.
3. Get all cases where the victim was under the age of 18.
4. Get all cases reported from the 77th Street division.
5. Get all cases which were reported between 2005 and 2007.

1.4 Schema

Case						
District	Bureau	<u>DR number</u>	Victim DR	Master DR	Notes	

Case (cont.)					
Date occurred	Date reported	Reporting District	Case Status	Case Status Date	

Case (cont.)				
Solvability Factor	Case Address	Weapon/Method Used	Motive	

Case (cont.)	
Last Modified Date	Last Modified By

1.5   Entity Relationship Diagram