CSC 289 Design Proposal 2/2/2018

***Introduction***: This proposal is inspired by a September 24, 2017 article in the Fayetteville Observer Times, “Could They Have Been Saved: North Carolina has paid a steep price for the failures of its child welfare system” by Greg Barnes. A newspaper investigation found more than 120 children have died in the state within a year of their parents or caregivers being referred to a DSS (department of social services) agency. A 2015 federal evaluation found that NC failed all 14 outcome and performance measures for child welfare. Among the findings were that many cases were closed prematurely while safety concerns remained. In CC (Cumberland County) DSS failed in 72% of cases to visit a home within the required 7-day timeframe of substantiated abuse or neglect. Another study commissioned by the state found DSS offices lacking in oversight and accountability. A shocking revelation was “DSS agencies have a hard time-sharing information with one another because most still log reports on paper rather than using a computer system.” “State officials say they expect to convert the DSS agencies to a computerized system called NC FAST, but they have been saying that since at least 2002.” In a follow up article published December 3rd, 2017, the case of Shaniya Davis, murdered at the age of 5, is reviewed. Her case highlighted a lack of communication between the police, school system and DSS. This “fatal flaw” is not uncommon. While there are many factors to be addressed, a good automated system would go a long way towards making it possible to share information in a timely fashion, address accountability and make tracking a case efficient.

***Problem Set***: A paper system hinders accessibility/sharing information, tracking cases and accountability/follow-up. Information is gathered from many different sources but not put together to paint a more complete picture of a case. Prominent identified sources include: DSS, Police and Schools. Other potential sources include hospitals, the court system and early child care facilities. Keywords: sources, case.

***Goal***: To create a working prototype that:

1. Allows sensitive data to be entered, stored and updated about an individual at risk by identified sources (DSS, Police, School System). (task)

2. Has a DB (database) that securely shares information (generates an alert message) with identified sources simultaneously for the purposes of:

a. determine if an individual is popping up on the radar of more than one source (cross-reference by name, date of birth, address, etc.)

b. enhance timely coordinated response and accountability by making all sources aware of reports on an individual as the report is input. (time stamp)

c. allows users to put information in and display information out for the purposes of tracking individuals and cases, coordinating response efforts.

***Desired Outcome***: Increase efficiency of child protection systems by enhancing timeliness of tracking cases, accountability through shared information, a more complete timely picture of what is happening to an individual at risk resulting in a measurable decrease in child deaths/injury and suffering.

***Prototype Description***:

Authenticate users- stored in DB, accept input and updates, generate alert messages (stored procedure), allow queries to retrieve information to track cases. All input to be timestamped and displayed with output. Application/DB accessible from multiple different physical machines and locations. User friendly dashboard. Dashboard functions include: Logon/logoff, enter information (add/update or create new record), display information (generate a report from a query), automatically display alert messages without user action (first event upon login).

***Identified Objects/Classes/Entities***:

User

Source (of input: DSS, Police, School)

Case

IndividualAtRisk

SocialWorker

School

CareGiver

Perpetrator

NoteComment (possible checklist (drugs, nutrition, health/mental conditions, physical environment danger) with text comments)

AlertMessage

Report/Query