

Feasibility Study

For our project, we will be building an application to manage the flow of information between shifts for the University of Miami Police Department. The goal of the project is to ensure that the Lieutenant performing roll call at the beginning of each shift will have all of the relevant information from the previous shift. Currently, all of this information is stored with pen and paper, and passed to the Lieutenant by hand.

The domain of our project is all of the information recorded during a shift. This includes BOLO's (be on the lookout for), information about open cases, incident reports, roll call (who showed up and when), scheduling information, and a map with updated locations of important events. Additionally, our application should link in with the UMPD Blue Book database for tracking notices from within the office as well as local and state and federal departments.

From our preliminary research, and our conversation with the UMPD, there is little to no software currently around that fills this need. Most departments, even large departments currently most of this process with pen and paper. Because of this our work will be completely original. Initially our target is the UMPD, but if our project is successful, it appears there would be a large demand for our product, and we could potentially scale up to other departments around the city or the state. If this were to be the case, we would expect to add more functionality and a nicer interface, and potentially even pursue monetary compensation.

Use cases:

- Messaging between UMPD personal
- Disperses announcements to various personal and tracks when they received this information for accountability purposes
- Records and tracking attendance of all UMPD personal (Roll Call)
- Searches through the various databases
- Populates a UM map with recent crimes and "hotspots" to present crime data in a more intuitive way
- Provides a time-frame search function on the UM map with various filtering options to provide a way to track particular types of crimes over time or isolate a specific time frame window
- Provides a computer interface for the various forms personal must fill out (e.g. Shift Commander Summary Reports, Case Reports, etc.)
- Manages the input data from the various forms in a centralized, searchable database
- Provides a searchable computer interface for UM's Blue Book database's information
- Provides a standardized form allowing officers to generate BOLOs that incorporate photos and/or video
- Populates the database with these BOLOs and disperses them within the department and sends them out to local law enforcement
- Manages task assignments and directed patrol assignments
- Provides a secure log-in for all personal and controls the level of information available to a particular officer based on his rank
- Ties in with the current scheduling software to make all personal schedules

Extra (reach) features:

- Analyzes the database's information for possible correlations between seemingly separate cases and suspects
- Tracks and reports trends and statistics in data (i.e. 82% of bike thefts happen between 2pm-5pm behind the Memorial building)
- Provides extra scheduling features allowing officers to: request specific days off and put in vacation requests, send a request to another officer for a shift-trade, place shifts that he would like/needs to have covered in a "bin", pick-up shifts that have been placed in this "bin", etc. Additionally, any scheduling changes will appear as "pending" until a supervisor approves them.