**Group 4 - The Budget Hawk**

**ITSC 3155 Final Project Proposal**

**Prepared by: 4/4/2021**

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# 1 Introduction

Recently the media has been plagued with reactions and analyses of police actions against suspects and other civilians. The outrage by the public called for the defunding of police departments as they were deemed unnecessary or excessive in how they protected communities. The ways in which police have handled past cases varies, but it heavily relies not only on the personnel they employ, but also the budget given to them. Higher budgets and costs are mainly for those departments who are in high crime-ridden areas where there is a huge need for resources for police officers to use to protect the general public.

This raises the question of how much is actually necessary for police departments to be able to effectively protect the people and enforce laws? It’s given that when there is a lot of crime, a lot of money is needed to sort out and solve these problems; however, what happens when crime rates go back down? How can we tell how the budget should be adjusted when the crime rates seem to dwindle? There is a need for regulation and efficiency in the budgets provided to police departments, so the departments can protect the community without putting a strain on the rest of the government budgets needed for regulation of the community.

## 1.1 Product Vision

Our new website named “The Budget Hawk” seeks to minimize budgetary expenditures in various cities and states by comparing police department spending against crime rates reported by the FBI. Thus, allowing for policy makers in those cities and states to minimize and properly prioritize their budgets if crime rates have been reliably declining.

1.2 Customer Description

This website will target policy makers in cities and states.

## 1.3 Project Scope and Objectives

The overall objective of this project (“The Budget Hawk”) is to prevent overspending within a state/city. The main features will be the ability for policy makers to pull crime records from the FBI and compare them. Once this information is processed “the budget hawk” will create a series of easily readable graphs based on the selected states and cities.

## 1.4 Ethical Concerns

Ethical concerns

# 2 Project Resources

## 2.1 Group Members

1. Austin Smith
2. Jack Hamilton
3. Kevin Hudson
4. Kylee Mucher

## 2.2 Data

### First dataset:

1. TheMarshallProject crime numbers for US cities from 1975-2015: <https://github.com/themarshallproject/city-crime/blob/master/data/ucr_crime_1975_2015.csv>

This source is the 2017 crimes reports in the United States of America directly from TheMarshallProject which pulled the numbers from the FBI. This source when paired with the fiscal spending of police departments in 2017 illustrates that police department funding increases with no correlation to the crime rates reported by the FBI.

### Second dataset:

1. FiSC database for police spending: <https://www.lincolninst.edu/research-data/data-toolkits/fiscally-standardized-cities/search-database>

This source is the fiscal spending of every police department in the United States of America in 2017 from the Lincoln Institute of Land Policy. This datasets allows our group to establish what various select cities budgetary expenditures are for their police departments. When paired with the crime reports from the FBI we can establish that police department funding increases regardless of the crime rates within their policing jurisdiction.

## 2.3 Hardware and Software Resources

## 2.4 Special Resources

# 3 Plan

## 3.1 Timeline Chart

### To Do by April 8th:

* Finalize Group Roles and Designated Tasks
* Start the Timeline for Project Completion

### To Do by April 13th:

* Finalize due dates for the week

### To Do by April 15th:

* Complete Final Report Sections 1-3 (Kylee and Austin)
* Design Sketches of Website Design Concept (Everyone)
  + Add to GitHub
* Source and Analysis of 1 Piece of Data (Everyone)
* Skeleton of Website (Jack)
  + Add Screenshot to GitHub
* Work on Chart Creation/Coding (Kevin)
  + Add Code to GitHub

### To Do by April 18th:

* User Stories Began (creating the WHO) (Everyone)

### To Do by April 22nd:

* Complete Final Report Sections 4-5 (Kylee and Austin)
* Website Pages Created and Design Layout Achieved (Jack)
  + Add a Few Screenshots to GitHub
* Data Completely Collects and Graph Started (Kevin)
  + Add Code to GitHub
* First Overview/Critique Session (Kylee)
  + Add List of Concerns/Suggestions to GitHub
* “About Us” Page Completed (Austin)

### To Do by April 25th:

* Finish User Stories (Everyone)
  + Add to GitHub
* First Edits Complete from Critique Session (Everyone)

### To Do by April 29th:

* Complete Final Report Sections 6-8 (Kylee and Austin)
* Website Completed (Jack)
  + Add a Screenshot of Each Page to GitHub
* Graph Completed and Embedded into Website (Kevin and Jack)
  + Add Screenshot and Code to GitHub
* Pre-Final Critique Session (Kylee)
  + Add List of Concerns/Suggestions to GitHub
* Submit for Review

### To Do by May 2nd:

* Review Critique from Early Submission and Finalize Edits (Everyone)
* Submit Final Product (Report, Website Link, GitHub link, Trello Link)

## 3.2 Task/Milestone Descriptions

### *Initial Project Discussion***:**

* Each group member thought of project ideas that we eventually narrowed down to our final idea.
* Each group member worked together to create a rough timeline for our project

### *Crazy 8s***:**

* Design sketches of project app concept
  + Each group member creates rough sketches of what the project would look like. Then we decide as a group which design we wish to implement.
* Explanation of 1 source
  + Each group member writes a brief description of what one of the dataset for our project contains. So, we all have a general understanding of the datasets we’re using.
* Skeleton of website design
  + A rough barebones design of our website is created. Our head designer Jack will implement the design for our website after we finalize the concept
* Worked on chart generation
  + Our graph coder Kevin will have worked on the graph to determine what he may need or if he needs assistance.
* Add documentation to the group github
  + Each group member will add their documentation to the group github. So, other group members can look at their work if they choose to do so.
* Standup for thursday to finalize “crazy 8s”
  + Each group member will come to thursday meeting with the information

### Next steps**:**

### Next steps**:**

## 3.3 2.3 Resource Table

## **3.1** Timeline Chart

Gantt Chart (with dates). [Video on Gantt charts in excel](https://www.youtube.com/watch?v=xsxi4qaEnOg)

Consider the following milestones:

- Milestone 0

- Milestone 1

- Milestone 2

- Milestone 3

- Milestone 4

- Milestone 6

## **3.2** Task/Milestone Descriptions

Milestone 1 - …

Milestone 2 - …

## 3.3 2.3 Resource Table

|  |  |
| --- | --- |
| **Task** | **People** |
|  |  |
|  |  |

# 4 System Design

## 4.1 Use Case Diagram

## 4.2 DFD diagram

## 4.3 User Stories

## 4.4 Feature List

## 4.5 Storyboard

# 5 User Tests

## 5.1 Test procedure

## 5.2 User Test and Results

## 5.3 Conclusion

# 6 Lessons Learned

# 7 Future work

# 8 Appendices

## 8.1 Sketches

## 8.2 Software Repository

8.3 WBS tool

## 

This section contains any additional information that you would like to include in the project proposal and plan.