WORK PLAN

INFM600 Section 0101

Jolly Jaguars

Divya Karunya Kannan

Akash Udani

Samarjith Jawaharlal Sathyanarayan

**Work Plan**

**Data Set:** Public Safety Calls Baltimore

Baltimore Police Department, (2016). Calls for Service [Calls\_for\_Service.csv]. Retrieved from <https://data.baltimorecity.gov/Public-Safety/Calls-for-Service/xviu-ezkt>, 09/12/2016.

**Research Questions**

We intend to answer the following questions using our dataset.

Q1. Are more 911 calls related to burglary made during the night? Or is that just a preconceived notion?  
Q2. Find out whether the number of blank calls increase/decrease with the arrival of the weekend?   
Q3. Find the top 5 violent reasons for calls (e.g. Aggravated assault). Plot them based on the locations.

* From which location (street) did most of these calls originate? Can we find the most dangerous locality in Baltimore based on the 911 calls?
* Is there a pattern for each of these calls with respect to their proximity to the coast? Do these calls increase in frequency when you get closer to the coast?

**Target Audience**

This information may be useful to potential home buyers who plan to set up residence in Baltimore County. It can help them make an informed decision about how safe a particular neighborhood is and what are the preventive measures they could take for ensuring personal and home safety. For example, if a family plans to move into a particular neighborhood and if there are more number of 911 calls related to burglary or larceny, then the family can decide on investing in a sophisticated home security system.

This data can also be used by the police department for deciding the number of personnel to be deployed in particular neighborhoods based on the number of 911 calls. The police may use this data to increase the patrolling during specific times of the day or during specific months of the year when the volume of 911 calls goes up. It can also help them decide the kind of counter measures to be implemented based on the kind of calls that they receive.

This data can be helpful to insurance companies, specifically the underwriting team in these companies, to decide the clauses to be added and the premium amount to be charged for particular policies. For example, if an individual belonging to an area that has reported high number of 911 calls related to auto-theft crimes, applies for a car policy, then the insurance company can probably charge him a higher premium considering the high risk of car theft.

**Effort Allocation and timeline**

|  |  |  |
| --- | --- | --- |
| **Tasks** | **Deadline** | **Assignee** |
| Work Plan | Week 6 - Oct 6 Thursday | Akash, Divya, Samarjith |
| Data Cleaning – Analysis | Week 6 weekend  Week 7 | Akash, Divya, Samarjith |
| Data Cleaning – Clarify questions | Week 7  Week 8 | Akash, Divya, Samarjith |
| Data Cleaning - Implementation | Week 8  Week 9 | Akash, Divya, Samarjith |
| Data Cleaning Documentation | Week 9 weekend  Week 10 - Nov 3 Thursday | Divya |
| Team Progress Meeting | Week 10 – Nov 3 Thursday | Akash, Divya, Samarjith |
| Analysis | Week 10 weekend  Week 11 | Akash, Divya, Samarjith |
| R Script Implementation | Week 11  Week 12 | Akash, Divya, Samarjith |
| R Script Documentation | Week 12 – Nov 17 Thursday | Akash |
| R Plot Implementation | Week 12 weekend  Week 13 | Akash, Divya, Samarjith |
| R Plot Documentation | Week 13 – Nov 24 Thursday | Samarjith |
| Further Analysis | Week 13 | Akash, Divya, Samarjith |
| Create presentation | Week 13  Week 14  Week 15 | Akash, Divya, Samarjith |
| Presentation | Week 15 | Akash, Divya, Samarjith |
| Git Package | Week 15 | Akash, Divya, Samarjith |

**Timelines and Gantt Chart**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Start Date** | **Duration (days)** | **End Date** | **Assignee** |
| Work Plan | 29-Sep | 7 | 5-Oct | All |
| Data Cleaning - Analysis and Clarify Questions | 6-Oct | 7 | 12-Oct | All |
| Data Cleaning Implementation | 13-Oct | 14 | 26-Oct | All |
| Data Cleaning Documentation | 27-Oct | 6 | 1-Nov | Divya |
| Team Progress Meeting | 2-Nov | 1 | 3-Nov | All |
| R Script Implementation | 3-Nov | 7 | 9-Nov | All |
| R Script Documentation | 10-Nov | 7 | 16-Nov | Akash |
| R Plot Implementation  And Documentation | 17-Nov | 7 | 23-Nov | All, Samarjith |
| Further Analysis and Create Presentation | 24-Nov | 7 | 30-Nov | All |
| Practice Presentation | 1-Dec | 6 | 6-Dec | All |
| Presentation and Submit GIT Package | 7-Dec | 1 | 7-Dec | All |

Word Count: 623