

# SFO CRIME ANALYSIS PROJECT

## **REQUIREMENTS DOCUMENT**



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Self-defined project involving the use of techniques from business analysis to collate requirements; Python/Data Science/Machine learning/Django/HTML/CSS techniques e.g., clustering, regex, geopandas etc to build the dashboard.

The document describes the requirements for the creation of a Dashboard in Django. *This is a fictional project with data obtained from open data sources*.

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## 1. Document History

#### **Document Location**

This document is stored on GitHub (Link).

#### **Revision History**

Latest version: 0.1

Version	Date	Author	<b>Revision Notes</b>
0.1	June 22, 2021	Audry	Initial draft

#### **Approvals**

Fictional project – approvals not required.

#### Distribution

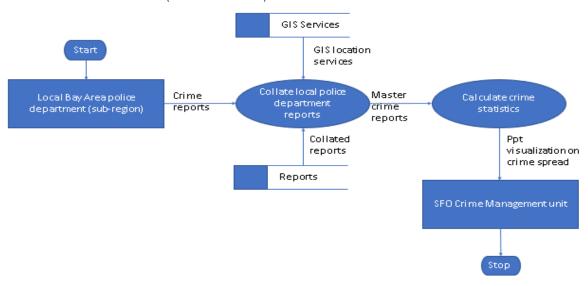
Name	Title	Version
Stakeholder 1	Head, SFO Police Department	Initial draft
Stakeholder 2	Head, SFO Crime Management Unit	Initial draft
Stakeholder 3	Head, SFO Crime Statistics Unit	Initial draft

# 2. Introduction & Scope

The San Francisco Police Department (SFOPD) requires an oversight of crime locations across the entire Bay Area, as reported by the sub-regional local police departments. The department currently relies on an excel spreadsheet which contains all the crimes reported in each sub-region. SFOPD would like a tool that will enable them visualize crime across the entire Bay Area.

Visualization of reported crimes. Capturing of crime incidents is out of scope.

#### Solution Context (As – is Process)



# 3. Detailed Requirements

## **Functional Requirements**

ID	Requirement	Owner
01	The system should show the map of crimes per region and their	
	total.	
02	The system should show the trend of the crime within the	
	entire SFO	
03	The system should show the most occurring commentary on	
	the crime descriptions within SFO	
04	The system should show the total crime within the entire SFO.	

## Reporting Requirements

ID	Requirement	Owner
01	The system should generate a summary report on crime within	
	the entire SFO	

#### Details below:

Requirement ID	01
Requirement Name	Creation of monthly crime summary report
Report Name	SFO Crime Summary Report
Report Description	An extract from the dashboard
Audience	SFO crime management unit, SFO Crime statistics unit
Source	Django dashboard
Criticality	High
Frequency	Monthly i.e., last business day of month
Delivery	Manual delivery
Content	a. Overall summary
	<ul> <li>Total crime per region</li> </ul>
	- Trend on total crime
	- Total crime per type
	<ul> <li>Most occurring crime descriptions</li> </ul>
	b. Sub-regional statistics
	<ul> <li>Map of crime locations per sub-region</li> </ul>
	<ul> <li>Total crime per type per region</li> </ul>

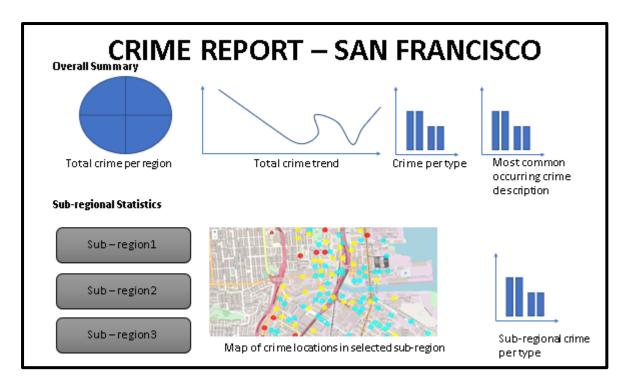
Requirements for csv output to be completed.

# 4. Appendix

Sample: Dashboard screen concept

The diagram below shows the final concept of the dashboard. The dashboard will be developed in stages:

- **Stage 1**: Overall statistics components (non-Geospatial) + *deployment to PythonAnywhere or AWS*.
- **Stage2**: Stage 1 components + sub-regional statistics (Geo-spatial)
- **Stage 3**: Stage 2 + data input/entry + databases
- **Stage 4**: Stage 3 + electronic reporting + downloads



Sample: Crime stats summary csv

To be added.

## Processes (To be)



# Organogram

