Inception Report

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Introduction: The aim of this project is to create an Open Data set portal for the city government with a specific emphasis on creating the data sets dynamic. The project will create data sets for different categories of interest to the citizens and visitors of the city, however, in the inception phase, one of the important categories of **Crime Statistics** will be worked on.

1. Vision and Business Case

Vision : To build an open data set leading the way to transparency and showcase the government's continuous improvements. Through provisioning, connectivity, timely driven data help to understand past, informs their present and plans their future.
Mission : Open data sets will provide historic as well as dynamic under different categories in a timely manner to all residents of the city, free of cost.

Business Case :

- Data collection - Data Validation - Data analysis - data services and products - Aggregate services
- Data will be useful , machine readable , informational to public with focus on crime rate.
- Data will be accessible using PDF , JSON and CSV format.
- Data maintenance to be auto updated.
- 4 phases will be required with 2 weeks per phase to create data sets with all requirements.
- Initial design, coding and publish data.

2. Use Case model

- Resident planning to open a store and wants to check crime rate in area.
- Resident opens City of Windsor website to explore open data sets related to crime.
- Data available in different formats such as data analysis as per types of crime, maps , graphs /table ,percentage indicator.
- Filter crime data set from available data sets/search data set using category
- Resident searches crime data sets to take random view and filter data to see monthly report in above provided forms.
- User select format and data available as per selection and user download data(JSON format to see data as well as CSV, PDF export)
- This data set provides an idea to user if it is safe to buy a shop in area or not.

3. Supplementary Specification

Nonfunctional requirement :readability, robustness, availability, usability **Functional requirements :** Data tracking, Administrative function, Interface, Technical, Data delivery, Linked to related system/database ,Security, Documentation, working software.

4. Glossary

Glossary and acronyms are provided for better understanding of related terms which will be updated based on future development phases.

- API: Application programming interface
- CSV: Simple format used to store data
- End Users: Humans
- JSON: JavaScript Object Notation
- Machine-readable document
- Open source: program whose source code is made available for use or modification by users.
- Re-users: Machines

5. Risk List and Risk management plan

- Risks related to privacy are identified as open data is a combination of public data, business data and personal data. It can be taken care of by proper planning about collecting concerns and managing licenses.
- Open data are accessed by humans (end users) and machines (re-users) so data should be understood without any misinterpretation. To avoid that risk Data can be published in widely spoken language/languages.
- Open and accessible data for Criminal records will increase awareness and safety for people however, it can increase various risks like failure in maintenance/updating of data in a timely manner or any cyber attacks. This leads to misinformation among the public. This type of risk can be avoided by verifying data accuracy and updating it in a timely manner

6.Prototype and Proof of Concept

- Prototype provided at the end of the report represents the portal where open data for crime records can be downloaded.
- When we click on Crime records, it opens the recently updated data and other options can be added based on requirements in near future.

7.Iteration Plan

In the first iteration of the elaboration phase, we will work on one of the high-risk categories in the creation of open data set portal, which is crime statistics of the City of Windsor.

- Implement the crime statistics open data set in various formats including excel sheets and PDF.
- Filters: Data can be filtered using various parameters like community/street name, pin code, type of crime etc
- Visibility:Adding public and private data sets
- Setting permissions to add, edit and delete data sets
- Graphical representation of raw data sets
- Adding API functionality

8.Development Plan

The Artifacts of UP are classified into the following categories as per whether they have any significance in each phase of the life cycle: • Must • Should • Could • Won't

9. Phase Plan and Software Development Plan

The development of Open data set portal for City of Windsor will be completed in a phased manner with different iterations. A Phase plan with timelines is shown below:

The Project Organizational structure will look as follows:

Training: Training on skills like OO Analysis and Design, Agile Modelling, JAVA, Web design will be conducted for the project team members.

Artifacts	How to use				Tools used
	Inception	Elaboration	Construction	Transition	
Use Case Model	Must	Must	Must	Must	Microsoft Word
Supplementary Specification	Must	Must	Must	Must	Microsoft Powerpoint
Glossary	Must	Must	Must	Must	Microsoft Word
Vision	Must	Must	Must	Must	Microsoft Word
Business Rules	Must	Must	Could	Must	Microsoft Word

Figure 1: Development Plan

Phase	No.of Iterations	Start	End
Inception	1	Week 1	Week 3
Elaboration	3	Week 3	Week 12
Construction	2	Week 12	Week 20
Transition	2	Week 20	Week 30

Figure 2: Phase plan

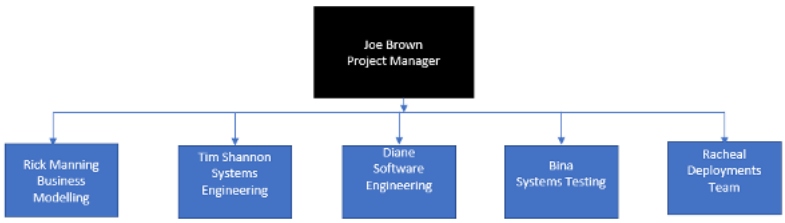

Figure 3: Organizational plan

References:

1. https://data.edmonton.ca
2. https://windsorpolice.ca/Pages/Home.aspx

Prototypes:

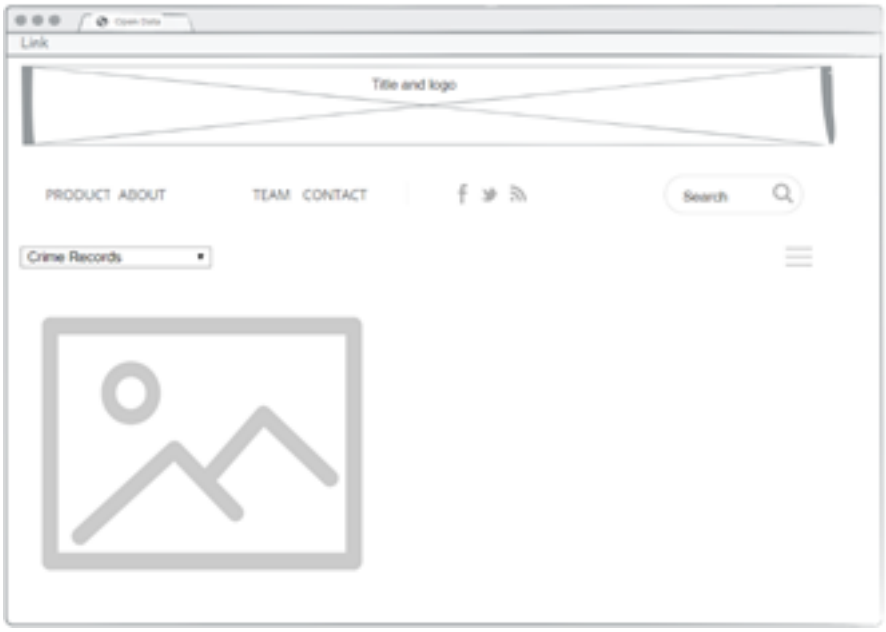

Figure 4: User Interface Prototype

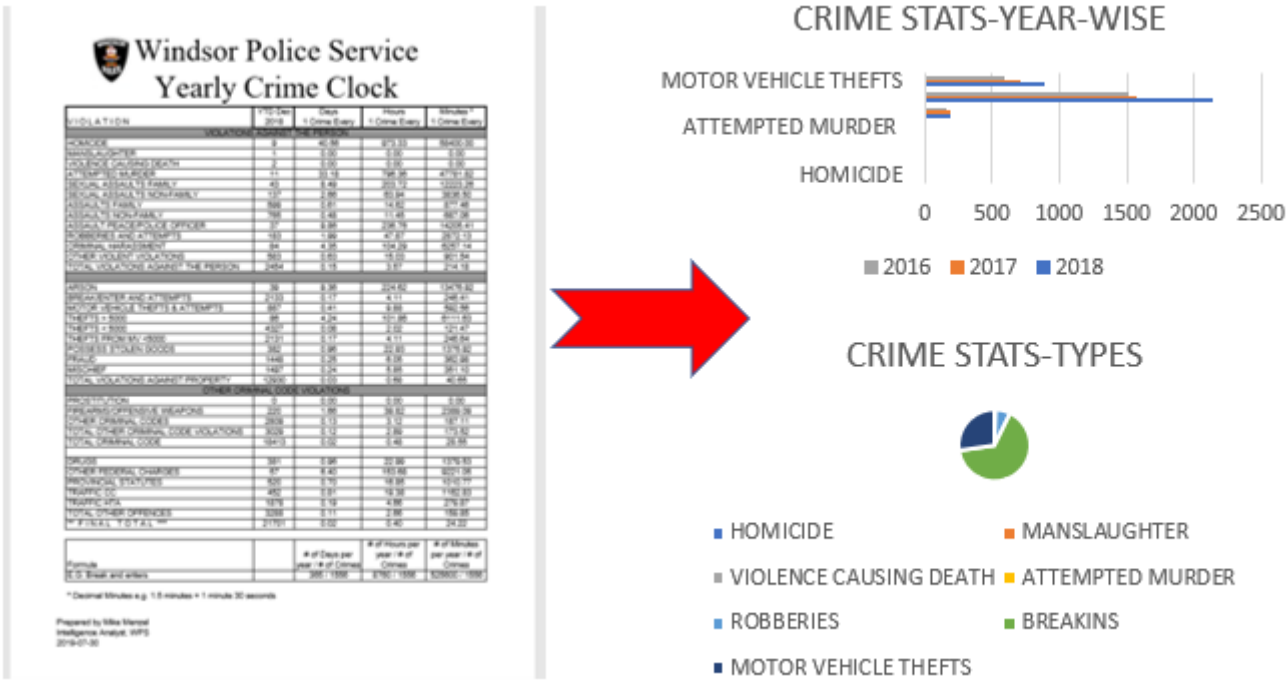

Figure 5: Once the user clicks on the crime data statistics, he will be able to view the raw open data set and also have an option to convert the data into a user friendly graphical format with use of APIs, shown as follows: