## DATASETS URLs

| **Dataset** | **URL** |
| --- | --- |
| Job vacancies, proportion of job vacancies and average offered hourly wage by selected characteristics, quarterly, unadjusted for seasonality - Dataset | https://open.canada.ca/data/en/dataset/67f90ff0-12ea-429a-99a6-7b41c73863a0/resource/2cfa6a73-0b66-4b6e-a07b-7285f0ea774c |
| Data tables, 2016 Census | https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dt-td/Rp-eng.cfm?TABID=2&Lang=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=1341679&GK=0&GRP=1&PID=110696&PRID=10&PTYPE=109445&S=0&SHOWALL=0&SUB=0&Temporal=2017&THEME=124&VID=0&VNAMEE=&VNAMEF=&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0 |
| 2016 Census Profile Web Data Service (JSON) | https://www12.statcan.gc.ca/wds-sdw/cpr2016-eng.cfm |
| Labour statistics consistent with the System of National Accounts (SNA), by job category and industry | https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610048901 |

## Segment 1 - Deliverables

**Task Manager** - Alec

### Presentation

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
| Editing ***ReadMe.md*** to state:   * Selected topic: prediction of job vacancies by NOC * Why this topic was selected:   + If you do not look out, then there is a possibility of economic collapse by location and industry. For example Alberta is heavily dependent on their oil production   + Helps with educational planning   + post-COVID economic recovery * Describing the data source - we got it from stats canada, this is what the data is like and this is what we want the data to look like * Questions they hope to answer with the data (the goal of the project) - to determine the potential amount of job vacancies in the next quarter | Esther |  |

### Github

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
| Editing ***ReadMe.md*** to state:   * Description of the communication protocols   We have a slack group  We meet on zoom | Esther | Nov 7, 2021 |
| Create individual branch   * Ensure 4 commits | Esther | Nov 7, 2021 |
| Create individual branch   * Ensure 4 commits | Wisam | Nov 7, 2021 |
| Create individual branch   * Ensure 4 commits | Jerry | Nov 7, 2021 |
| Create individual branch   * Ensure 4 commits | Olesya | Nov 7, 2021 |
| Create individual branch   * Ensure 4 commits | Alec | Nov 7, 2021 |

### Machine Learning

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
| Provisional machine learning model  (a stand in for the actual final model)   * Takes in provisional database * Outputs label(s) for input data   Diagram and use text to explain models, what is output of classification of model, what are the inputs of the model, within powerpoint, be ready to explain each component  A diagram   * What the structure of the machine learning model will look like * A classification? A regression model * What are the inputs? * What are the outputs? * Machine learning does not need to be connected to database in this segment   Current states vs Future  Time Series  Machine learning   * Using a regression model (training and testing) * Supervised machine learning   *\*NOTE: this should probably be done by at least 2 people* | Alec and Wisam | Nov 7, 2021 |

### Database

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
| Create ERD of Datasets |  | Nov 7, 2021 |
| Provisional database  (a stand in for the final database)   * Sample data that mimics the expected final database structure or schema * Draft machine learning module is connected to the provisional database   ER diagram   * Statements and sample for each table * A csv of four to five sample rows to show what the data looks like * Postgress should be up and running * Python should be up and running   Schema   * Vacancies by province * Vacancies by job vacancies characteristics * Vacancies by industry   *\*NOTE: this should probably be done by at least 2 people* | Jerry and Olesya |  |

### Dashboard

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
| Outline for final Dashboard   * Where are we hosting the dashboard? * What is mock lay out and what kind of data do we * What to show the client? * What kind of story do we want to tell?   Not needed but encouraged   * What would the dashboard be look like * “I will have three reports in my dashboard” * Which technology are we using for dashboard (tableau)   Dashboard will have map of canada   * Heatmap showing the amount of vacancies by province * Heatmap showing job vacancies by industries that allows filtering - link to the bar chart * Bar chart of top 20 industries by job vacancies * Machine learning output   + This is what we have today and this is what we may have in the future | Esther | Nov 7, 2021 |

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## Segment 2 - Deliverable

### Presentation

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
|  |  |  |

### Github

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

### Machine Learning

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
|  |  |  |

### Database

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
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|  |  |  |

### Dashboard

| **Task** | **Assigned to** | **Due** |
| --- | --- | --- |
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