## Project Proposal

Compare the Canadian dollar to FX rates worldwide.

Understand how market fluctuation correlates to FX rates.

Understand how the price of Gold Impacts FX rate.

FX rates can be obtained through a number of free API’s, including the Bank of Canada.

Study time period: 25 years

Questions to be asked

* What countries are the highest and lowest FX rates compared to Canada?
* Insight into current market when import / export goods and services. When is the best time to trade?
* Which countries FX rates are affected by price fluctuations/market volatility of the major exchanges in the world? (China Russia, India, Canada, USA)
* International money transfer / payments. When is the best time to make those transactions?

## Project Scope

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| Project | Project Team | Date |
| FinTech Bootcamp Project 1  Group 6 | Larry Gagnon gagnon1175@gmail.com | April 5, 2023 |
| Jassy Badwal jassyb0921@gmail.com |
| Ganna Kassantini gannakas41@gmail.com |
| Kainat Ahmed kainatahmed57@gmail.com |
| Eric Lamoreaux elamoureaux32@gmail.com |
| Justification | | |
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| Goals/ Objectives | | |
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| Scope Description / Work breakdown | | |
| Description | | Comment |
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| Out of Scope | | |
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| Milestones | | |
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| Exclusions / Constraints | | |
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| Assumptions | | |
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| Deliverables | | |
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| Technical Requirements | | |
| * Use Pandas to clean and format all dataset(s). | | |
| * Create a Jupyter Notebook describing the data exploration and cleanup process.   (add descriptive markup text) | | |
| * Create a Jupyter Notebook illustrating the final data analysis.   (Create cells with just text) | | |
| * Use PyViz, GeoViews, and Hvplot to create six to eight data visualizations * (ideally, at least two per question asked of the data). | | |
| * Save PNG images of the visualizations to distribute to the class and instructional team, as well as for the presentation, and your repo's README.md file. | | |
| * Use one new Python library that hasn't been covered in class. (Pyfolio, Zipline) | | |
| * Optional: Use at least one API, if an API can be found with data pertinent to your primary research questions. | | |
| * Create a README.md in your repo with a write-up summarizing your major findings. This should include a heading for each question that was asked of your data, with a short description of what you found and any relevant plots under each heading. | | |
| * Write this as a brief summary of your interests and intent, including: * The kind of data you'd like to work with and the field you're interested in (e.g., trading, quantitative analysis). * The kind of questions you'll be asking of that data. * Possible sources for such data. | | |
| Presentation Requirements | | |
| * Be 8–10 minutes in length (check with the instructor for the official presentation time). | | |
| * Describe the project's core message or hypothesis. | | |
| * Describe the questions the group found of interest, and why. | | |
| * Summarize how, and where, the data was found to answer these questions. | | |
| * Describe the data exploration and cleanup process (accompanied by Jupyter Notebook). | | |
| * Describe the analysis process (accompanied by Jupyter Notebook). | | |
| * Summarize the conclusions. This should include a numerical summary (i.e., what data did the analysis produce), as well as visualizations of that summary (plots of the final analysis data). | | |
| * Discuss the implications of the findings (which shall take the form of an open-ended discussion about what the findings mean). | | |
| * Tell a good story! Storytelling through data analysis is no different than in literature. Find your narrative and use your analysis and visualization skills to highlight conflict and resolution in your data. | | |

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| Task list | | | |
| Description | Assigned | Target date | Status |
| Create README.md |  |  |  |
| Create GitHub repository/manage access |  | 20230405 |  |
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