PROJECT DESCRIPTION

Global Trade Visualizer

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# Background description

In today’s world, free trade stands as the main building block of a modern society. Free trade is a trade policy that does not restrict imports or exports.

One of the main organizations that handles the data related to trading is the WTO (World Trade Organization) (Anon., 2020). The institution is dealing with trade agreements between nations, and thus helps traders to conduct their business. Records of these agreements can be accessed freely by anyone through the services provided by WTO.

People working in international trade and supply chain, focus on analyzing these kinds of records to draw insights that can be helpful in both private business’ and government’s future endeavors (Carr, 2019).

Therefore, all accounts of imports and exports within international trade are important to them. However, due to the global scale of trade, the data generated from these transactions are hard to decipher because they are too detailed. For something as simple as tracing how a specific product has been traded, they must sift through a lot of information, and often it is hard to “read”.

*The objective* for this project is to make a tool to visualize the trade of products without spending too much time in gathering and processing the required data, and making the exploration of imports and exports data easier and more enjoyable by combining different technologies to create intuitive visualizations. It should be more user-friendly and intuitive to use than providing only the usual graphical representation of data by symbols, lines, bars and pie charts used in most programs that deal with such data.

*The result* of the project should be an interactable top-down map view of the world that allows users to select countries and then present the data about imports and exports through visually displayed links to other countries, on that same map.

# Definition of purpose

The purpose of the product is to give a person the opportunity to draw insights from detailed information about international imports and exports.

# Problem Statement

Below, there are some overall questions that encompass the final goal of the project.

**Overall Question**: How to present, in a user-friendly manner, trade information between countries?

**Sub-Question**: How to select relevant data provided by external provider?

**Sub-Question**: How will the relevant data be stored?

**Sub-Question**: How will the components communicate between each other?

# Delimitation

-The system will not make predictions on current data

-The system will not handle planning of supply chain

-The system will not contain all internationally recognized countries

# Choice of models and methods

|  |  |  |
| --- | --- | --- |
| What? | Why? | Which? |
| How to select relevant data provided by external provider? | To programmatically access online information. | Any officially recognized source of information on the subject (ex: WITS) |
| How will the relevant data be stored? | To reduce strain on information providers. | Import and Export data between countries |
| How will the components communicate between each other? | To ensure scalability and maintainability. | REST APIs with rendering application primarily. |

## Project Management

Methodology: lightweight version of SCRUM

* 2 Week Sprint
* Burndown Chart
* Backlog
* Sprint Planning Meeting

The difference between SCRUM and the lightweight version of SCRUM is that there are no daily standup meetings, no retrospective meetings and no review meetings. They are all blended in the meetings that happen throughout the sprint.

Task Management: Azure DevOps

Version Control: GIT

Group Communication: Discord

Reference Control: Mendeley

Documentation: Microsoft Word, LaTeX

## Test Strategy

* Unit Tests
  + Individual classes are tested to ensure no existing feature is broken.
* Usability Tests
  + Success of specific scenario

# Time schedule

## Sprint Planning

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sprint # | Monday | Tuesday | Wednesday | Thursday | Friday |
| 1 |  |  |  |  |  |
|  |  |  |  |  |
| 2 |  |  |  |  |  |
|  |  |  |  |  |
| 3 |  |  |  |  |  |
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| 7 |  |  |  |  |  |
|  |  |  |  |  |
| 8 |  |  |  |  |  |
|  |  |  |  |  |

Supervisor Meetings - Orange

Sprint Planning Meetings – Blue

Grey for the first week and white for the second week in the sprint.

## Important Dates

25 ECTS = 687.5 Hours per Student

2062.5 hours in total (3 students)

Project Period start: 7th of September 2020

Project Deadline: 18th of December 2020

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Risks | Description | Likelihood  Scale 1-5  5 = high risk | Severity  Scale 1-5  5 = high risk | Risk mitigation  e.g. Preventive & Responsive actions | Identifiers | Responsible |
| Risk not to meet the requirements | Lack of time, poorly made schedule, insufficient knowledge; | 2 | 5 | Preventive:  Proper management of the requirements; Respect the schedule;  Responsive:  Accomplish what was agreed on; | Being behind the schedule; | Andrei |
| Technical issues | Software crashes, broken computers, unsaved files; | 3 | 5 | Preventive:  Having everything backed up on GitHub;  Responsive:  Restore data from GitHub; | Corrupt data; | Claudiu |
| Group conflicts | Fights and disagreements between members; | 1 | 4 | Preventive:  Follow Group Contract;  Responsive:  Try to compromise; |  | Stefan |

# Risk assessment

# Bibliography

Carr, W., 2019. *‘Imports and Exports: The Benefits of Utilizing Trade Data’*. [online] Available at: <https://blog.marketresearch.com/imports-and-exports-the-benefits-of-utilizing-trade-data> [Accessed 19 Mar. 2020].

Heakal, R., 2019. *What Is International Trade?* [online] Available at: <https://www.investopedia.com/insights/what-is-international-trade/> [Accessed 19 Mar. 2020].

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