Politisense

Backlog:

1- Data Analysis & Scraping:

- In this feature, the developer will perform data analysis, including
    ii. Data acquisition/centralization (writing algorithms to interact with the various government APIs and centralize the data)
    iii. Data profiling and cleaning
    iv. Data visualization
    v. Data classification

- Both collecting data and centralizing data are important steps since the data is scattered and not organized in a fashion required for this project.
- Data profiling and cleaning involves data detecting and correcting corrupt or inaccurate records. Given that the data will not be in a uniform format, there will be effort required to standardize the data that may be in different formats from the various sources.
- Data visualization is also a crucial step since we need to come up with innovative and appealing user interface that facilitates usability and provides good user experience. (Involves designing a few different components that can display our data. For instance, pie charts, bar diagrams, etc)

2- Interactive Map (Desktop only)

- This feature involves using Canada's maps that will provide the user with the ability to zoom in and out, allows the users to identify each province, display electoral information about the province, and any other information related to it, including the member of the parliament for that province
- One of the challenges on implementing this feature to consider is usability.
  - The system 's user interface should be adaptive, efficient and simplified for end users to do the most common operations quickly and efficiently

3- Geolocation & Social Interest

a. Based on location and common interests, the system prompts users to meet and discuss outside the website somewhere based on specific topic.
b. Note: these events and meetings should be coordinated with the government, or public organization to avoid any problems.

4- Chatbot

a. Onboarding: the chatbot will be introduced for the end users by the system during the data extraction via questionnaires
b. FAQ: the chatbot will be responsible on answering all the questions related to politics including political terms, etc.
c. Usability and Portability are the main concerns when implementing this feature since
   i. The chatbot should be well-represented, visible and more appealing in any platforms, including mobile phones and desktops

ii. The chatbot should be usable and easy tool for the end users

5- Twitter posting / New Feeds

a. The system would automatically post on twitter

b. Post contents:

- information related to some current facts about some upcoming bill/ legislation passing soon
- labels and tags added in the form of hashtags
- link to our website to 'learn more' (will help to draw more users to our website)

6- On Website Polls

a. The system will provide the user with series of bills

b. The system will provide the user with the ability to

i. Vote if they are against/for to specific bill

ii. Add a comment about his/her opinion

iii. View a chart that shows how other users have voted

- Based on specific metrics, it could be based on age, gender, location, etc.

iv. View users' feedback/thoughts about that specific bill

c. Usability should be concerned when implementing this feature to make it easier for the users to interact with.

d. Crucial part of this feature: some sort of learning algorithm will have to be introduced here that would learn about the type of bills that the users support or are against. This information is crucial for the next feature – the Discover feature

7- Discover feature

a. Based on the 'learning' done through the polling feature (#6) the system would automatically generate 'playlists' of bills organized by very specific topics (ie: 'fiscal policy', 'oil pipelines', 'CFC regulation'. These 'playlists' would include past and future bills.

b. The aim of this feature is to make the user aware of bills they otherwise would not have found on their own.

c. There would be a significant research and development involved in designing a good enough algorithm that could effectively propose bills that are truly relevant and interesting to the user.

8- User and admin dashboards

a. Separate dashboards for user and admin

b. User dashboard involves designing and implementing a highly engaging and simple interface for users to access all information.

c. Admin dashboard from which admins could manually enter data if it is very recent, or any other scenario that would require manual updating.

9- Graphs for displaying data in an attractive way (included in the dashboard)

a. Designing several component that can display the information in an appealing and engaging way.