Purple Politics Software Design Document

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Revisions

Date	Description	Revision	
6/6/2021	Created the Document	0	
6/19/2021	Added Class Diagram	1	
7/12/2021	Modified Class Diagram Added Data Diagram Added Introduction Added Software Architecture Added Endpoint Names	2	
7/16/2021	Modified Text Analysis Structure	3	

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1 Introduction

1.1 Problem Definition

US Politics is a complex subject. Most, if not all topics regarding politics include perspectives from varying sides of the political spectrum. Current news sources show their stories from their spot on the political spectrum with no acknowledgement of their bias. This makes it easy to trap yourself in an echo chamber and be blind to the arguments from all places on the spectrum.

1.2 Purpose

Purple Politics is a platform that exposes the various perspectives of the political spectrum. By analyzing and displaying the sentiment of articles from other news websites, it will give the user a better understanding of political events.

1.3 Scope

This design document is made to show a high level representation of the software that this website is comprised of.

2 Architecture Design

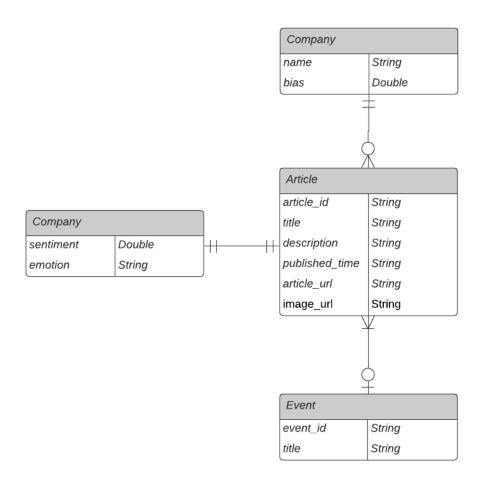
2.1 Overview

The static website will be hosted on Netlify, and the backend hosted on heroku. The backend will connect to a MongoDB Atlas cloud database.

3 Data Design

Purple Politics Database Diagram

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4 Component Design

Purple Politics Class Diagram EventCollector TextAnalyzer + events:Clusterer + collectors:ArticleCollector [] + get_text_info(Articles):TextInfo [] + get_events(current_events):Event [] ArticleCollector Clusterer + company:Company + url:str + add(articles): + get_events:Event [] + get_articles(max_articles):Article [] Article + company:Company + title:str Event TextInfo + tute:str + description:str + published_time:str + article_url:str + image_url:str + text_info: Textinfo + event_id:str + sentiment:float + tone:str + title:str + articles:Article [] Company + name:str + bias:float

5 API Endpoints

Base URL: https://purple-politics.herokuapp.com

PUT: /update-data

GET: /events GET: /articles