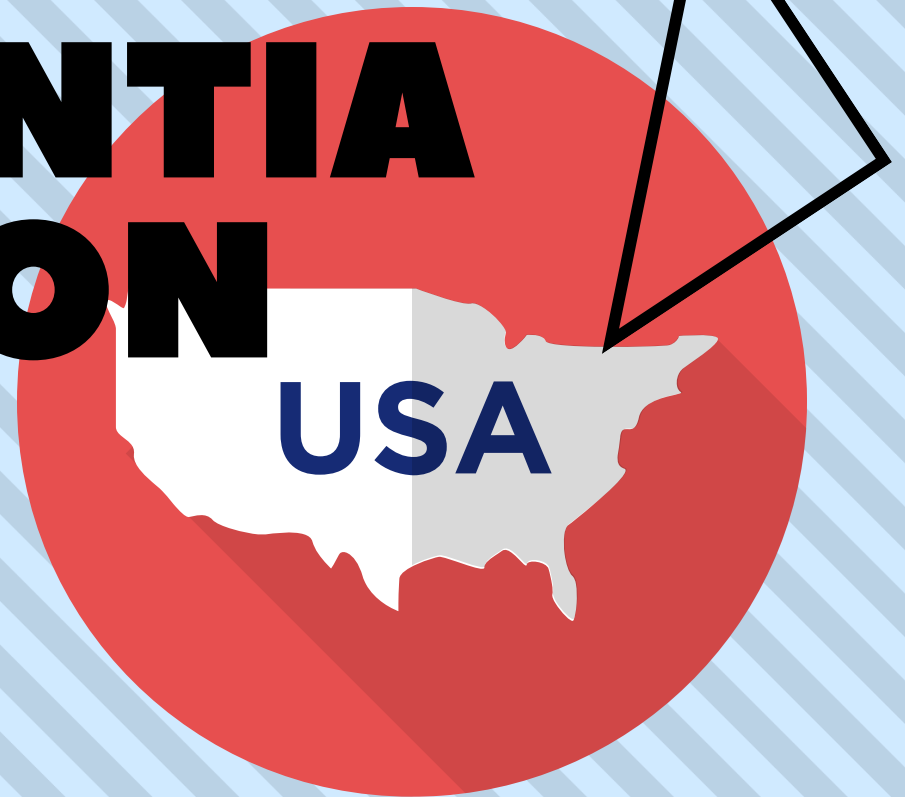



PRESIDENTIAL ELECTION MAPS

FROM 1920

TEAM FIVETHIRTYNINE





PROJECT OUTLINE

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01

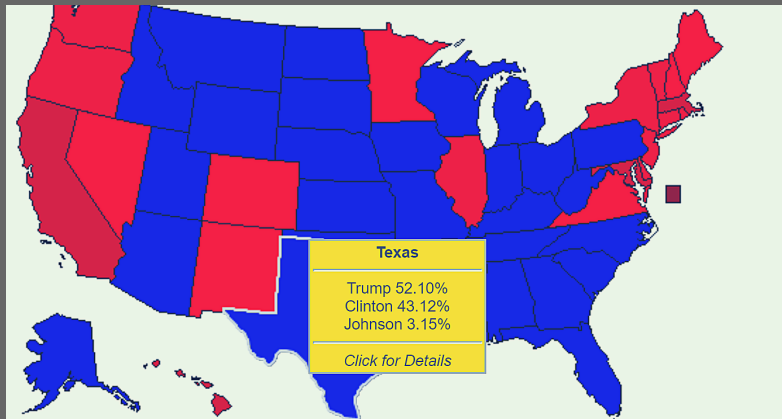
INTRODUCTION

IDEA

Build an interactive app with map and table to show United States Presidential Election Results from year 1920.

People could choose the years, candidates or states to check the results.

FIRST PANEL



The first panel is the U.S. map.
Our map has been colored
according to election results.

SECOND PANEL

This panel has a table to show
the detailed results of each
candidates in each states.

Presidential Candidate	Vice Presidential Candidate	Political Party	Popular Vote		Electoral Vote	
Donald J. Trump	Michael R. Pence	Republican	62,985,134	45.93%	304	56.5%
Hillary Clinton	Tim Kaine	Democratic	65,853,652	48.02%	227	42.2%
Write-ins	-	-	1,154,084	0.84%	7	1.3%
Gary Johnson	William F. Weld	Libertarian	4,489,235	3.27%	0	0.0%
Dr. Jill Stein	Ajamu Baraka	Green	1,457,226	1.06%	0	0.0%
Evan McMullin	Mindy Finn	Independent	732,273	0.53%	0	0.0%
Other (+)	-	-	453,880	0.33%	0	0.0%
Total			137,125,484		538	

01

INTRODUCTION

DATA SOURCE

We used the data from Wikipedia.

State or district	Electoral method	Hillary Clinton Democratic			Donald Trump Republican			Gary Johnson Libertarian			Jill Stein Green			Evan McMullin Independent			Others		
		#	%	Electoral votes	#	%	Electoral votes	#	%	Electoral votes	#	%	Electoral votes	#	%	Electoral votes	#	%	Electoral votes
Alabama	WTA	729,547	34.36%	—	1,318,255	62.08%	9	44,467	2.09%	—	9,391	0.44%	—	—	—	—	21,712	1.02%	—
Alaska	WTA	116,454	36.55%	—	163,387	51.28%	3	18,725	5.88%	—	5,735	1.80%	—	—	—	—	14,307	4.49%	—
Arizona	WTA	1,161,167	45.13%	—	1,252,401	48.67%	11	106,327	4.13%	—	34,345	1.33%	—	17,449	0.68%	—	1,476	0.06%	—
Arkansas	WTA	380,494	33.65%	—	684,872	60.57%	6	29,829	2.64%	—	9,473	0.84%	—	13,255	1.17%	—	12,712	1.12%	—
California	WTA	8,753,788	61.73%	55	4,483,810	31.62%	—	478,500	3.37%	—	278,657	1.96%	—	39,596	0.28%	—	147,244	1.04%	—
Colorado	WTA	1,338,870	48.16%	9	1,202,484	43.25%	—	144,121	5.18%	—	38,437	1.38%	—	28,917	1.04%	—	27,418	0.99%	—
Connecticut	WTA	897,572	54.57%	7	673,215	40.93%	—	48,676	2.96%	—	22,841	1.39%	—	2,108	0.13%	—	508	0.03%	—
Delaware	WTA	235,603	53.09%	3	185,127	41.72%	—	14,757	3.32%	—	6,103	1.37%	—	706	0.16%	—	1,518	0.34%	—
District of Columbia	WTA	282,830	90.48%	3	12,723	4.07%	—	4,906	1.57%	—	4,258	1.36%	—	—	—	—	6,551	2.52%	—
Florida	WTA	4,504,975	47.82%	—	4,617,886	49.02%	29	207,043	2.20%	—	64,399	0.68%	—	—	—	—	25,736	0.28%	—
Georgia	WTA	1,877,963	45.64%	—	2,089,104	50.77%	16	125,306	3.05%	—	7,674	0.19%	—	13,017	0.32%	—	1,668	0.04%	—
Hawaii	WTA	266,891	62.22%	3	128,847	30.03%	—	15,954	3.72%	—	12,737	2.97%	—	—	—	—	4,508	1.05%	—
Idaho	WTA	189,765	27.49%	—	409,055	59.26%	4	28,331	4.10%	—	8,496	1.23%	—	46,476	6.73%	—	8,132	1.18%	—
Illinois	WTA	3,090,729	55.83%	20	2,146,015	38.76%	—	209,596	3.79%	—	76,802	1.39%	—	11,655	0.21%	—	1,627	0.03%	—
Indiana	WTA	1,033,126	37.91%	—	1,557,286	56.82%	11	133,993	4.89%	—	7,841	0.27%	—	—	—	—	2,712	0.10%	—
Iowa	WTA	653,669	41.74%	—	800,983	51.15%	6	59,186	3.78%	—	11,479	0.73%	—	12,366	0.79%	—	28,348	1.81%	—
Kansas	WTA	427,005	36.05%	—	671,018	56.65%	6	55,406	4.68%	—	23,506	1.98%	—	6,520	0.55%	—	947	0.08%	—
Kentucky	WTA	628,854	32.68%	—	1,202,971	62.52%	8	53,752	2.79%	—	13,913	0.72%	—	22,780	1.18%	—	1,879	0.10%	—
Louisiana	WTA	780,154	38.45%	—	1,178,638	58.09%	8	37,978	1.87%	—	14,031	0.69%	—	8,547	0.42%	—	9,684	0.48%	—
Maine (at-lg)	WTA ^[c]	357,735	47.83%	2	335,593	44.87%	—	38,105	5.09%	—	14,251	1.91%	—	1,887	0.25%	—	356	0.05%	—
Maine, 1st	CD ^[c]	212,774	53.96%	1	154,384	39.15%	—	18,592	4.71%	—	7,563	1.92%	—	807	0.20%	—	209	0.05%	—
Maine, 2nd	CD ^[c]	144,817	40.98%	—	181,177	51.26%	1	19,510	5.52%	—	6,685	1.89%	—	1,080	0.31%	—	147	0.04%	—

data source: https://en.wikipedia.org/wiki/United_States_presidential_election,_2016

METHODS

WEB SCRAPING

- Wikipedia table includes state results for all presidential candidates
- Single data source with more robust data on third party candidates
- Filter desired table from Wikipedia page
- Make the format of tables consistent across years
- Difficulties: Maine & Nebraska
- Allocate electoral votes by congressional district & overall popular vote
- No uniform criterion detailing when the Wikipedia table
- Keep overall state popular vote only

02

METHODS

SHINY

structure inspired by SuperZip app

01 US map with states specified

- visualize using leaflet
- construct U.S. map using spatial data from "albersusa"
- color palette details state level results
- pop-up when clicking on each state
- cursory info on local result: electoral votes, winner, margin of victory
- pie charts for popular and electoral vote tallies

02

METHODS

SHINY

02 detail result of elections

- a dataframe is displayed
 - concise way of displaying large amount of information
 - users can select state and candidates to see specific results

02



RESULT

SHOW SHINY APP

03



04

DISCUSSION

ADVANTAGE

- Interactive map with stand alone election data
- More robust information on third party candidates

04

DISCUSSION

DISADVANTAGE

- Non-standard formatting of Wikipedia tables
- Difficulty scraping data for Maine and Nebraska

04

DISCUSSION

FUTURE DEVELOPMENTS

- **Add temporal component:
interactively display
electoral trends over
time**