

A grayscale background image showing a person's hands filling out a ballot. The word "VOTE" is visible on the ballot paper.

# BALLOTPEDIA

The Encyclopedia of American Politics

**Jr. Data Engineer and Researcher Test**

# Prompt

Ballotpedia is working to expand local elections coverage. The following slides contain examples of government websites that list candidates up for election.

We would be looking to extract much of this data into a format that includes:

- Election date
- Political office name
- Location or jurisdiction of the office (county, city, state, etc.)
- Candidate name
- Political party

Looking at the example data sources on the following slides, **please write up your initial thoughts on how you might approach such a project** – potential technologies (languages, libraries, frameworks, tools), basic data flow, and potential issues to look out for.

# Prompt

Note that we are not looking for an exact architecture, but are interested in learning about your own familiarity with data engineering tools and approaches. One page would be a sufficient response.

Keep in mind:

- We would want to create scripts / processes that are reusable for future election years, wherever possible.
- For accuracy, there must be steps for human review / editing.

Please email responses to [bp-tech-test@ballotpedia.org](mailto:bp-tech-test@ballotpedia.org) and be sure to include your full name.

# Example 1: table

## 2023 June Republican Primary - Local Candidates

 [Download this file](#)

Locality Name	Office Title	Jurisdiction On Ballot	Incumbent	Candidate Name	Candidate Status	CampaignAddressLine1	CampaignAddressLine2	Campaign City	Campaign State	Campaign Zip	Campaign Email
BOTETOURT COUNTY	Member Board of Supervisors	Blue Ridge District	NO	Walter G. Michael	Qualified	1215 Archway Road		Blue Ridge	VA	24064	wmg44@aol.com
BOTETOURT COUNTY	Member Board of Supervisors	Blue Ridge District	YES	Billy W. Martin Sr.	Qualified	426 Mountain Pass Rd		Blue Ridge	VA	24064	bilbec3@gmail.com
BOTETOURT COUNTY	Member Board of Supervisors	Valley District	NO	Robert R. Young	Qualified	165 Norfolk and Western Ave		Cloverdale	VA	24077	robertyoung581@yahoo.com
BOTETOURT COUNTY	Member Board of Supervisors	Valley District	YES	Donald M. "Mac" Scothorn	Qualified	1025 Highland Dr		Roanoke	VA	24019	macscothorn@yahoo.com
BUCHANAN COUNTY	Clerk of Court	Buchanan County	NO	Alisha Smith Stiltner	Qualified	PO Box 304		Big Rock	VA	246030304	stiltneralisha@yahoo.com
BUCHANAN COUNTY	Clerk of Court	Buchanan County	NO	Christie Coleman Stiltner	Qualified	1710 Red Dirt Rd		Vansant	VA	246568501	christie4clerk@gmail.com
BUCHANAN COUNTY	Commonwealth's Attorney	Buchanan County	NO	M. Nikki Stiltner	Qualified	PO Box 930		Grundy	VA	246140930	nikkistiltner@gmail.com
BUCHANAN COUNTY	Commonwealth's Attorney	Buchanan County	YES	Gerald Douglas Arrington	Qualified	PO Box 1555		Grundy	VA	246141555	g_arrington@outlook.com

<https://www.elections.virginia.gov/casting-a-ballot/candidate-list/2023-june-republican-primary---local-candidates/>

# Example 2: interactive website

Input:

mivic.sos.state.mi.us/PublicBallot/Index

worker  
mation  
n statistics  
formation  
ad questions  
oes (michigan.gov)

View ballot by county, jurisdiction  
and precinct

Required fields are marked with an asterisk.

\* Election

May Consolidated - 5/2/2023

\* County

Charlevoix County

\* Jurisdiction

Chandler Township

\* Precinct

Precinct 3

Clear

View the ballot

Output:

STATE GENERAL		
Tuesday, November 8, 2022    Barry County, Michigan    MAPLE GROVE TOWNSHIP, Precinct 1		
PARTISAN SECTION		
State		
GOVERNOR AND LIEUTENANT GOVERNOR		
Vote for not more than 1		
Gretchen Whitmer	\$	Democratic
Garlin D. Gilchrist II	\$	
Tudor M. Dixon	\$	Republican
Shane Hernandez	\$	
Mary Buzuma	\$	Libertarian
Brian Ellison	\$	
Donna Brandenburg	\$	U.S. Taxpayers
Melissa Carone	\$	
Kevin Hogan	\$	Green
Destiny Clayton	\$	
Daryl M. Simpson	\$	Natural Law
Doug Dern	\$	
SECRETARY OF STATE		
Vote for not more than 1		
Jocelyn Benson	\$	Democratic
Kristina Elaine Karamo	\$	Republican
Gregory Scott Stempfle	\$	Libertarian
Christine C. Schwartz	\$	U.S. Taxpayers
Larry James Hutchinson Jr.	\$	Green
ATTORNEY GENERAL		
Vote for not more than 1		
Dana Nessel	\$	Democratic
Matthew DePerno	\$	Republican
Joseph W. McHugh Jr.	\$	Libertarian
Gerald T. Van Sickle	\$	U.S. Taxpayers
Congressional		
REPRESENTATIVE IN CONGRESS		
2nd DISTRICT		
Vote for not more than 1		
Jerry Hilliard		Democratic
State Boards - Continued		
TRUSTEE OF MICHIGAN STATE UNIVERSITY		
Vote for not more than 2		
Dennis Denno	\$	Democratic
Renee Knake Jefferson	\$	Democratic
Mike Balow	\$	Republican
Travis Menge	\$	Republican
Claranna Gelineau	\$	Libertarian
Max Riekse	\$	Libertarian
Robin Lea Laurain	\$	Green
GOVERNOR OF WAYNE STATE UNIVERSITY		
Vote for not more than 2		
Danielle Atkinson	\$	Democratic
Marilyn Kelly	\$	Democratic
Christa Murphy	\$	Republican
Craig Wilsher	\$	Republican
Bruce Jaquays	\$	Libertarian
Marc Joseph Sosnowski	\$	U.S. Taxpayers
Susan Odgers	\$	Green
County		
COUNTY COMMISSIONER		
5th DISTRICT		
2 Year Term		
Vote for not more than 1		
Mike Callton	\$	Republican
COUNTY COMMISSIONER		
7th DISTRICT		
2 Year Term		
Vote for not more than 1		
Bruce D. Campbell	\$	Republican
NONPARTISAN SECTION		
Judicial		
JUSTICE OF SUPREME COURT		

<https://mivic.sos.state.mi.us/PublicBallot/Index>

Confidential Ballotpedia 2022

# Example 3: sample ballot

OFFICIAL DEMOCRATIC BALLOT		
Cherry Township		
SULLIVAN COUNTY, PENNSYLVANIA MUNICIPAL PRIMARY ELECTION MAY 16, 2023		
<p><b>INSTRUCTIONS TO VOTERS:</b> To vote, fill in the oval (●) completely next to the candidate of your choice. To vote for a person not on the ballot, fill in the corresponding oval (●) and manually write in his/her name in the space provided. Use only pen or pencil. If you spoil your ballot, do not erase but ask for a new ballot.</p> <p><b>WARNING:</b> If you receive an absentee or mail-in ballot and return your voted ballot by the deadline, you may not vote at your polling place on election day. If you are unable to return your voted absentee or mail-in ballot by the deadline, you may only vote a provisional ballot at your polling place on election day, unless you surrender your absentee or mail-in ballot and envelope to the judge of elections to be voided to vote by regular ballot.</p>		
<b>JUSTICE OF THE SUPREME COURT</b> (Vote for ONE)	<b>COUNTY SHERIFF</b> 4 Year Term (Vote for ONE)	<b>COUNTY CORONER</b> 4 Year Term (Vote for ONE)
<input type="radio"/> DANIEL MCCAFFERY Philadelphia County	<input type="radio"/>	<input type="radio"/>
<input type="radio"/> DEBBIE KUNSELMAN Beaver County	Write-In _____	Write-In _____
<input type="radio"/>	<b>PROTHONOTARY, REGISTER AND RECORDER, CLERK OF COURTS</b> 4 Year Term (Vote for ONE)	<b>COUNTY AUDITOR</b> 4 Year Term (Vote for not more than TWO)
Write-In _____	<input type="radio"/> KELLIE CARPENTER	<input type="radio"/>
<b>JUDGE OF THE SUPERIOR COURT</b> (Vote for not more than TWO)	<input type="radio"/>	Write-In _____
<input type="radio"/> PAT DUGAN Philadelphia County	Write-In _____	<input type="radio"/>
<input type="radio"/> TIMIKA LANE Philadelphia County	<b>COUNTY TREASURER</b> 4 Year Term (Vote for ONE)	Write-In _____
<input type="radio"/> JILL BECK Allegheny County	<input type="radio"/>	
<input type="radio"/>	Write-In _____	

# Example 4: list

## DEMOCRATIC BALLOT

### STATE OFFICES (All Precincts within Westmoreland County)

#### **Justice of the Supreme Court – Ten Year Term – Vote for One**

DANIEL MCCAFFERY – Philadelphia County

DEBBIE KUNSELMAN – Beaver County

#### **Judge of the Superior Court – Ten Year Term – Vote for Not More Than Two**

PAT DUGAN – Philadelphia County

TIMIKA LANE – Philadelphia County

JILL BECK – Allegheny County

#### **Judge of the Commonwealth Court – Ten Year Term – Vote for One**

MATT WOLF – Philadelphia County

BRYAN NEFT – Allegheny County

### COUNTY OFFICES (All Precincts within Westmoreland County)

#### **County Commissioner – Four Year Term – Vote for Not More Than Two**

TED KOPAS – Hempfield Township

SYDNEY HOVIS – Scottdale Borough

#### **County Controller – Four Year Term - Vote for One**

#### **County Treasurer – Four Year Term – Vote for One**

#### **Sheriff – Four Year Term – Vote for One**

TOMMY JOHN HAMACHER – Unity Township

#### **Recorder of Deeds – Four Year Term – Vote for One**

#### **Register of Wills and Clerk of the Orphans' Court – Four Year Term – Vote for One**

### MAGISTERIAL DISTRICT COURT

#### **Magisterial District Judge 10-1-01 – Six Year Term – Vote for One**