### Sudo rm -rf / Politifind

### Fall 2017

Overview: NOTE: With the implementation of our team choice searching functionality, our server depends on the algoliasearch\_django module that can be installed by running \$ pip install algoliasearch-django

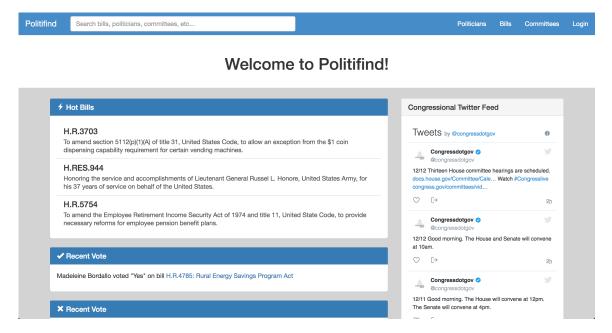
Politifind aims to make data about all the happening in Congress accessible and intuitive to the average user. We have designed a web app to nicely compile all such data into pages that can easily be navigated too and connected with each other. Most government websites have this data in difficult to read formats, or in formats that are not intuitive/connected. Politifind aims eliminates this problem, and allows people to stay informed about all that's going on.

Members: Andrew Bass, Matthew Bissaillon, Matthew Gramigna, Justin Kennedy

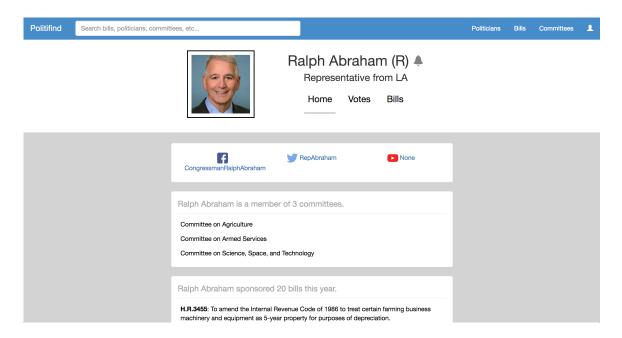
Github: https://github.com/arbass22/politifind

### User Interface:

**Home page:** This page shows the recent events on bills as well as votes. If the user is logged in then it can show more customized information such as updates on bills the user is subscribed to. The search bar at the top allows searching of bills, committees, and politicians at the same time.



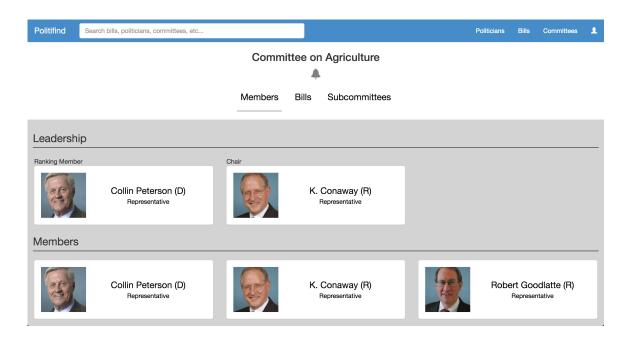
**Politician Page:** This page shows details on a selected politician, such as recent votes, sponsored bills, and social media accounts. There are multiple tabs that can be used to browse for more information. Everything like bills and committees is linked to the right pages for easy browsing. In addition, users can subscribe to the politician.



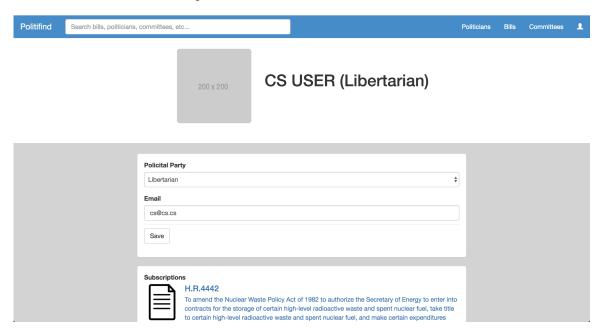
Bill Page: This page details on each bill. It allows users to see the summary, sponsors, actions, and similar bills. It also shows congressional vote data and allows Politifind users to vote on a bill, adding an optional comment to their representatives in congress. Users can also subscribe to the bill by clicking the bell icon.



Committee Page: This page shows members of a committee, bills under consideration, and subcommittees. Users can subscribe to committees as well.



**Profile Page:** This page allows users to update basic details of their profile, such as email, picture, party. It also shows the user their subscriptions.



**Search Page:** If the typeahead in the search bar does not yield the result the user is looking for, they can hit enter and be taken to this search page. It will show all of the results (bills, politicians, and committees), rather than just the top ones.



### Results for "bill"



Data Model: The following diagram is our updated data model for Politifind with the following descriptions:

*Profile*: Includes authentication fields for the django User as well as information about this user's politifind profile.

Politician: Represents a member of congress in either the house or senate.

Bill: A congressional bill.

Politician Vote: Indicates how a specific Politician voted on a specific bill. User Vote: Indicates how a specific politifind user voted on a specific bill.

Committee: Represents a committee in congress.

SubCommittee: Represents a subcommittee of an existing politified Committee object.

CommitteeMembership: Indicates that a specific Politician is a member of a specific Committee.

BillCommittee: Indicates that a specific Committee introduced a specific Bill.

BillSponsorship: Indicates which Politician sponsored a specific Bill.

BillAction: An action that has happened on a specific Bill.

UserPoliticianSubscription: Indicates that a politifind user subscribed to a specific Politician.

UserBillSubscription: Indicates that a politifind user subscribed to a specific Bill.

UserCommitteeSubscription: Indicates that a politified user subscribed to a specific Committee.

# Profile user: OneToOneField(django auth User) name: CharField email: CharField party: CharField picture: CharField

Politician
pid: CharField
name: CharField
party: CharField
picture: CharField
state: CharField
title: CharField
twitter: CharField
facebook: CharField
youtube: CharField
dob: DateField
missed_votes_pct: FloatField
votes_with_party_pct: FloatField

Bill
bid: CharField
code: CharField
name: CharField
status: CharField
subject: CharField
summary: CharField
latest_action_date: DateField
latest_action: CharField
sponsor: ForeignKey(Politician)
total_yes: IntegerField
total_no: IntegerField

## UserCommitteeSubscription user: ForeignKey(Profile) committee: ForeignKey(Committee) date\_subscribed: DateField

UserVote
user: ForeignKey(Profile)
bill: ForeignKey(Bill)
vote: CharField
date_voted: DateField
comment: CharField

PoliticianVote
politician: ForeignKey(Politician)
bill: ForeignKey(Bill)
vote: CharField
date_voted: DateField
BillSponsorship

	BillActi	ion
bill: Fore	eignKey(Bill)	
action: (	CharField	
action_c	date: DateField	

politician: ForeignKey(Politician)

bill: ForeignKey(Bill)

cid: CharField
name: CharField
chair: ForeignKey(Politician)
ranking_member: ForeignKey(Politician)
chamber: CharField

Committee

## UserBillSubscription user: ForeignKey(Profile) bill: ForeignKey(Bill) date\_subscribed: DateField

UserPoliticianSubscription
user: ForeignKey(Profile)
politician: ForeignKey(Politician)
date_subscribed: DateField

SubCommittee
sid: CharField
name: CharField
parent: ForeignKey(Committee)

CommitteeMembership
committee: ForeignKey(Committee)
politician: ForeignKey(Politician)
relationship: CharField

BillCommittee
ill: ForeignKey(Bill)
committee: ForeignKey(Committee)

### URL Routes/Mappings:

route	name	description
r'^\$'	index	route users to the home page
r'^bill/(.*)/\$'	bill	individual bill page
$r^{\hat{p}} = r^{\hat{p}} $	politician	individual politician page
r'^politicians/\$'	politicians	list of all politicians
r'^bills/\$'	bills	list of all bills
r'^committee/(.*)/(bills subcomittees)*\$'	committee	individual committee page
r'^committees/\$'	committees	list of all committees
r'^profile/\$'	profile	user's profile page
r'^search/\$'	search	display's search results
r'^accounts/'	accounts	adds login/logout/etc urls
$r^{^{\prime}}$ vote/(.*)/(yay nay)*/'	vote	view individual vote page
r'^subscribe/\$'	subscribe	user can subscribe
r'^unsubscribe/\$'	unsubscribe	user can unsubscribe
r'^profile/update/'	update profile	have a user update their profile page

Authentication/Authorization: We added a one-to-one mapping between Django's User model and our

custom Profile model, allowing a user to specify additional information, such as political party, profile picture, etc.. Our users can browse Politifind without logging in, but when they do they have some additional functionality, such as subscribing to various politicians, bills, and committees, or voting on bills to see how they stack up against all politifind users and/or congress. We also enable to profile view to a logged in user where they can view all of their subscriptions and change their profile info. Lastly, the homepage is templated differently based on whether or not a user is logged in. We have one permissions group for a user that allows them to modify their info, or add votes and subscriptions, but it does not allow them to for example change the data of a bill, as it shouldn't.

Team Choice: For our team choice, we decided to integrate the Algolia Search API into our app to allow the user to very quickly search through all the data in politifind. To do this, we added two features. The first is an autocomplete search that reacts to what the user types in the search bar and displays results in a dropdown. this searching can happen from any of our views. The other feature is an actual search page. If a user does not want to look at the dropdown results, they can hit enter and it will bring them to a search page displaying the results from their query. We used the Algolia Javascript client for the autocompleting, and the algoliasearch-django pip module mentioned before for the search page.

#### Conclusion: