

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`

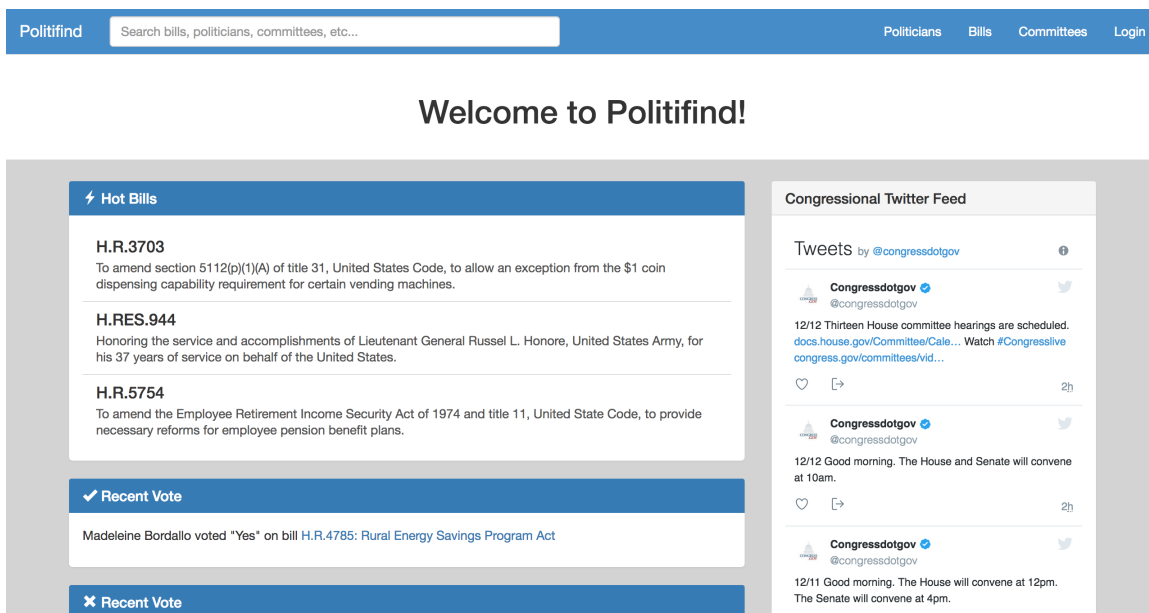
Politifind aims to make data about all the happening in Congress accessible and intuitive to the average user. We have designed a web app to nicely compile all such data into pages that can easily be navigated too and connected with each other. Most government websites have this data in difficult to 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 Bissailon, 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.

Politifind
Search bills, politicians, committees, etc...
Politicians
Bills
Committees



Ralph Abraham (R)
Representative from LA

Home
Votes
Bills

 CongressmanRalphAbraham
 RepAbraham
 None

Ralph Abraham is a member of 3 committees.

- Committee on Agriculture
- Committee on Armed Services
- Committee on Science, Space, and Technology

Ralph Abraham sponsored 20 bills this year.

H.R.3455: To amend the Internal Revenue Code of 1986 to treat certain farming business machinery and equipment as 5-year property for purposes of depreciation.

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.

Politifind
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H.R.4457

To amend title 38, United States Code, to establish the Veterans Accountable Care Organization and to provide veterans access to private health insurance plans, and for other purposes.

Vote:

Yay
Nay

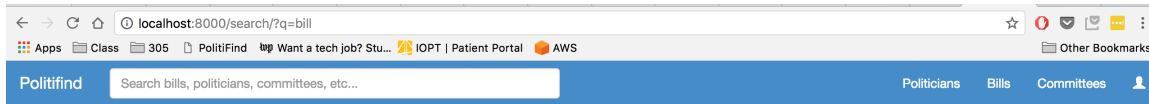
Sponsor:



Doug Lamborn (R)
Representative

Votes:

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



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.

PoliticianVote: Indicates how a specific Politician voted on a specific bill.

UserVote: Indicates how a specific politifind user voted on a specific bill.

Committee: Represents a committee in congress.

SubCommittee: Represents a subcommittee of an existing politifind 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 politifind user subscribed to a specific Committee.

Profile user: OneToOneField(django auth User) name: CharField email: CharField party: CharField picture: CharField	UserCommitteeSubscription user: ForeignKey(Profile) committee: ForeignKey(Committee) date_subscribed: DateField	UserBillSubscription user: ForeignKey(Profile) bill: ForeignKey(Bill) date_subscribed: DateField
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	UserVote user: ForeignKey(Profile) bill: ForeignKey(Bill) vote: CharField date_voted: DateField comment: CharField	UserPoliticianSubscription user: ForeignKey(Profile) politician: ForeignKey(Politician) date_subscribed: DateField
	PoliticianVote politician: ForeignKey(Politician) bill: ForeignKey(Bill) vote: CharField date_voted: DateField	SubCommittee sid: CharField name: CharField parent: ForeignKey(Committee)
	BillSponsorship bill: ForeignKey(Bill) politician: ForeignKey(Politician)	CommitteeMembership committee: ForeignKey(Committee) politician: ForeignKey(Politician) relationship: CharField
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	BillAction bill: ForeignKey(Bill) action: CharField action_date: DateField	BillCommittee bill: ForeignKey(Bill) committee: ForeignKey(Committee)
	Committee cid: CharField name: CharField chair: ForeignKey(Politician) ranking_member: ForeignKey(Politician) chamber: CharField	

URL Routes/Mappings:

route	name	description
r'^\$',	index	route users to the home page
r'^bill/(.*)/\$'	bill	individual bill page
r'^politician/(.*)/(bills votes)*'	politician	individual politician page
r'^politicians/\$'	politicians	list of all politicians
r'^bills/\$'	bills	list of all bills
r'^committee/(.*)/(bills subcommittees)*\$'	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'^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 politfind 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: Overall, we worked well as a team, understanding what needed to get done and the various deadlines. We are happy with our final project, and would like to continue working on it in the future. One of the main takeaways we got from this project was the importance of clearly defining efficient and sensible data models. Having an understanding of the exact type of data you want to template makes templating it even easier. One difficulty we had was leaving our background on component-based Javascript frameworks (Vue and React) and moving towards the Django templating. It was initially difficult to make this transition, but after project 2 we were pretty solid with this. As mentioned in a previous writeup, we also had a large technical hurdle gathering all of the data required for our project. After we got past this hurdle, the project really started to come together though. Going into the project, we wished we spent more times thoroughly reading the homeworks when we were doing them, as it would've made certain steps of the projects much easier and would have saved lots of time.