

# Plan

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## Features:

Like what we mentioned in our Topic, we are going to design an event and location driven web application called What's Happening. Essentially, the way this app works is that it integrates with multiple APIs and the events people posted. In details, without signing up or logging in, everyone is able to see a scaled local map where an event will be coming on the main page. If the user signs in, he/she is able to post events instead of just reading events. Here is a more detailed list of basic features and additional features:

### Basic features:

1. Without register or login, anyone can view the events posted by others
2. For hosts, they can post events (requires login)
3. For people, they can resgistr events (requires login)

### Additional features:

1. Bring in google map API to show the location of incoming events
2. Search for events according to event name, location, time, category.
3. Email reminder when an registered event is approaching.
4. Current weather report for a location's event.
5. User login with Facebook, Duke NetID and Google account.

## Tecnologies:

In terms of the technology we are going to use. For frontend, the framework we are going to pick is Vue, since we have done the project Trello so we are pretty familiar with Vue. Moreover, we are going to use “npm webpack” template as the starting point. We want our website to be components driven. A list of technology (both frontend and backend) and list of APIs are shown below.

Frontend: Vue

Backend: Node.js, PostgreSQL

APIs:

Visualization: Google Map API,

Email: SendGrid API

Weather: Wunderground

Third party login: Facebook API, Duke NetID API, Google account login API

We want to use the idea of routing, which is to separate client side and server side. Since our project might involve some searching & matching problems, thus, we want to have those happen in the backend. Another reason of separating this is because we want to make our App both scalable and real time, thus, we couldn't afford to have our users' websites keep refreshing. Lastly, we plan to server our website with on GitHub, Duke Server, or Heroku.

### **Data:**

Since the first stage of our app is to serve Duke community, thus, the static/initial data we are going to use is sourced from Duke Event calendar. At the very bottom of the page (<http://calendar.duke.edu/>), there is an URL builder (<http://urlbuilder.calendar.duke.edu/>). From here, we are able to retrieve the data that both happened before and in the future (in 90 days).

Here is a link if you want to take a look what the data looks like

([http://calendar.duke.edu/events/index.json?&future\\_days=45](http://calendar.duke.edu/events/index.json?&future_days=45))

Our dataset is downloaded and will be updated periodically from Duke Event. The format is csv. Here is a screenshot of our dataset.

1	summary	start	end	description
2	Exhibit: Manifest: Photographs by Wendel White	02/17/2018 12:00 AM	06/03/2018 12:00 AM	The Manifest portfolio consists of phot
3	Photography Exhibition: "Red Summer"	02/21/2018 09:00 AM	06/02/2018 05:00 PM	"Red Summer" is a project by photogra
4	Exhibit: The Activist Archive: SNCC Collections in the Rubenstein Library	02/22/2018 12:00 AM	06/17/2018 12:00 AM	The Activist Archive will displays selecti
5	MOOC: Environmental Security & Sustaining Peace	03/01/2018 12:00 AM	04/26/2018 12:00 AM	Learn about the role that natural resour
6	Duke Hospital Exhibit: Cary Photographic Artists Members' Exhibit	03/01/2018 12:00 AM	05/02/2018 12:00 AM	Arts & Health at Duke presents Cary Ph
7	Exhibit: Terry Sanford: A Change Leader for Duke	03/14/2018 12:00 AM	08/04/2018 12:00 AM	As Duke University President from 1970
8	24-Hour Name Reading Ceremony (continues)	04/09/2018 12:00 AM	04/09/2018 12:00 PM	Every year, the Coalition for Preserving I
9	Greek Ally Week	04/09/2018 12:00 AM	04/15/2018 12:00 AM	Greek Ally Week is a week dedicated to
10	Conquering Body: 1/2 Day Reproductive Justice Conference	04/09/2018 08:30 AM	04/09/2018 12:30 PM	Conquering Body: 1/2 Day Reproductiv

series-name	presenter
rial culture such as diaries, slave collars, human hair, a drum, souvenirs, and other objects, some with great significance and others simply quotidian representations of daily life in the history of the African Amer	
tions of contemporaneous newspaper reporting." Specifically, "the 'Red Summer' portfolio represents the stories of various locations in the American landscape where racial violence . . . erupted between 1917	
ript Library. SNCC was one of the key organizations of the Civil Rights Movement, and the only one organized and led by young people. Working alongside local people in the rural South, SNCC activists work	
line, global, free): Environmental Security & Sustaining Peace0x0A0x0AFor more inform	Dr. Erika Weinthal
0x0A Arts & Health Exhibit Series	Cary Photographic Artists
0x0A today. Through historical photographs, Sanford's speeches and diaries, and the words of his contemporaries, the exhibit explores race relations and equality, student leadership, the arts, public service, and p	
and education to the Duke community in ways that are meaningful and unique. This event brings over 300 students and faculty members together to raise our voices in honor of those who lost theirs. Please jo	
Making Greek Life at Duke A More Welcoming Space For All. Some events include- Ally 101 & 201 Training, Private Ally and LGBTQ discussion groups, a panel of LGBTQ Greek students speaking about their e	
ize your priorities in advance if you see a line.	
ss. We'll also discuss how to market yourself successfully for each of the different sectors including how to communicate your relevant skills to different types of employers.0x0A0x0A*Register by clicking More	
powering individuals to affect change in destructive systems. In her nearly three decades as a leading artist with the Ballet Frankfurt and the Forsythe Company, and as a primary collaborator of choreographer	
CBB Student Seminar	Ken Dill
faith development All are welcome at our Masses and any of our activities. For more information visit our website at catholic.duke.edu or email catholic@duke.edu	

sponsors	categories	cost	location
e Libraries, Center for Documentary Studies (CDS), David M. F	Multicultural/Identity, United States Focus, Exhibit, Ongoing	Free	Rubenstein Library Pho
s Center for Documentary Studies (CDS), Archive of Documen	Ethics, Human Rights, United States Focus, Diversity/Inclusion, Exhibit, Ongoing	Free	Center for Documentary
g Libraries, David M. Rubenstein Rare Book & Manuscript Libr	Multicultural/Identity, Human Rights, United States Focus, Civic Engagement/Social Action	Free	None
Nicholas School-Enrollment Services	Multicultural/Identity, Leadership, Global, Ongoing, Training, Workshop/Short Course	Online, Global, Free	Online
Arts & Health at Duke	Visual and Creative Arts, Entrepreneurship, Exhibit, Health/Wellness, Ongoing		See description
ii Libraries, David M. Rubenstein Rare Book & Manuscript Libr	Exhibit, Ongoing	Free	Rubenstein Library Mar
tr Coalition for Preserving Memory (CPM)	Multicultural/Identity, Leadership, Human Rights, Civic Engagement/Social Action, Diversity/Inclusion, Global, Panel/Semina		Abele Quad
Blue Devils United (BD United)	Leadership, Lecture/Talk, Panel/Seminar/Colloquium, Training, Meeting, Workshop/Short C	0	Bryan Center
Women's Center, Progress. Period. (PP)	Student		Women's Center
Brett School of Engineering, Career Center			None

contact-name	link	event_link
None	<a href="https://library.duke.edu/exhibits/2018/wendelwhite">https://library.duke.edu/exhibits/2018/wendelwhite</a>	<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6</a>
CDS Front Desk		<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918084-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918084-6</a>
None	<a href="https://library.duke.edu/exhibits/2018/SNCC">https://library.duke.edu/exhibits/2018/SNCC</a>	<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6</a>
	<a href="https://nicholas.duke.edu/about/events/mooc-environmental-sec">https://nicholas.duke.edu/about/events/mooc-environmental-sec</a>	<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6</a>
None	<a href="https://artsandhealth.duke.edu/programs/visual-arts/current-exh">https://artsandhealth.duke.edu/programs/visual-arts/current-exh</a>	<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918082-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918082-6</a>
None	<a href="https://library.duke.edu/exhibits/2018/sanford">https://library.duke.edu/exhibits/2018/sanford</a>	<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6</a>
None		<a href="http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6">http://calendar.duke.edu/events/show.html?fq=id:CAL-2c918086-6</a>

Last but not least, we also designed our database’s schemas. There are 4 tables we are planning to use. Here is the detail.

```

SQL Schema1: An event:
{
    Eid,
    name,
    time,
    location,
    category,
    description,
    capacity,
    strictly_over_21,
    registration deadline (if exists)
    open to public: Boolean,
    administrator
}

```

SQL Schema2: An User

```
{  
    Uid,  
    name,  
    gender,  
    age,  
    major,  
    interests  
}
```

SQL Schema3: User\_Event

```
{  
    eid1: uid1,  
    eid2: uid3,  
    ...  
}
```

SQL Schema4: User\_Group

```
{  
    uid1: gid1  
    uid1: gid2  
    ....  
}
```