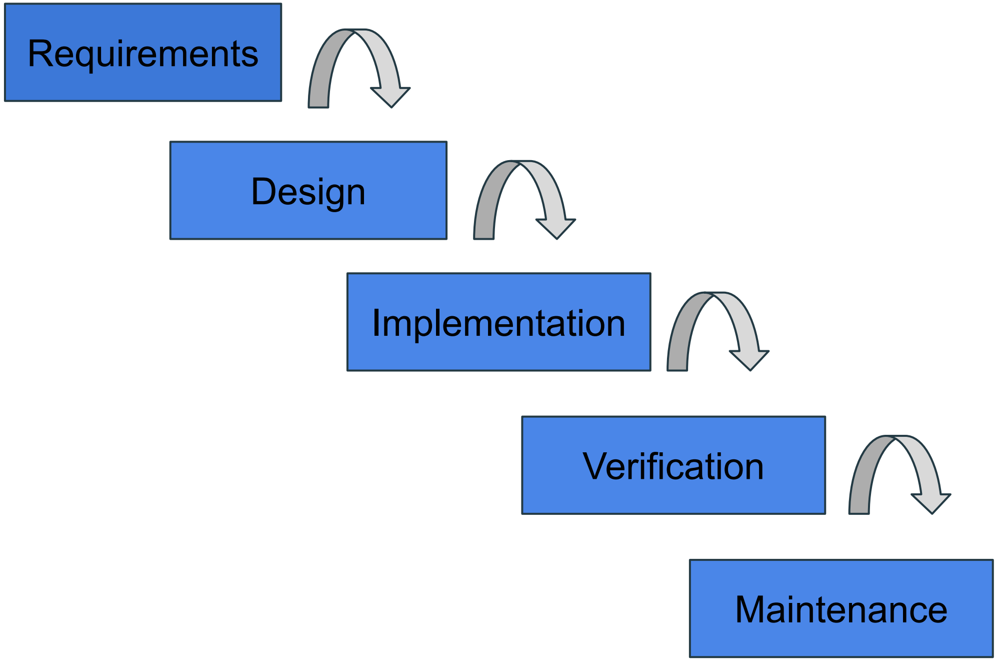
Buff Guide

Project Lead Pidgeon (PLP):
Andrew, Justin, Michael, Christen, Rachel, Daniel

Methodology: Waterfall



Requirements

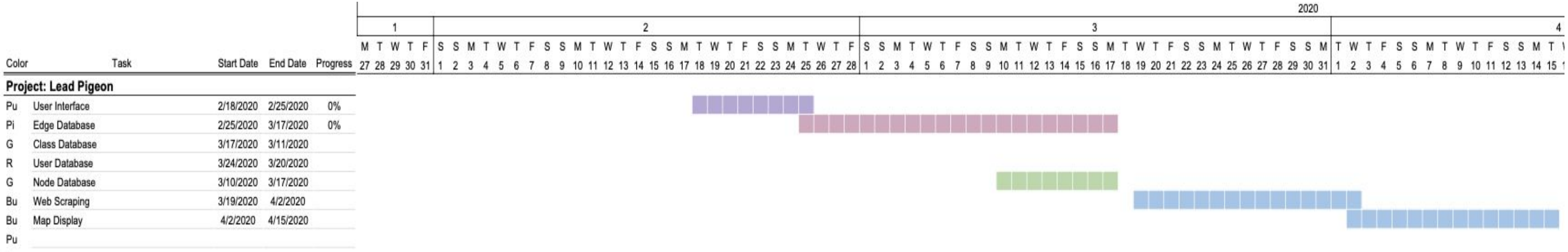
Design

Implementation

Verification

Maintenance

Gantt Chart

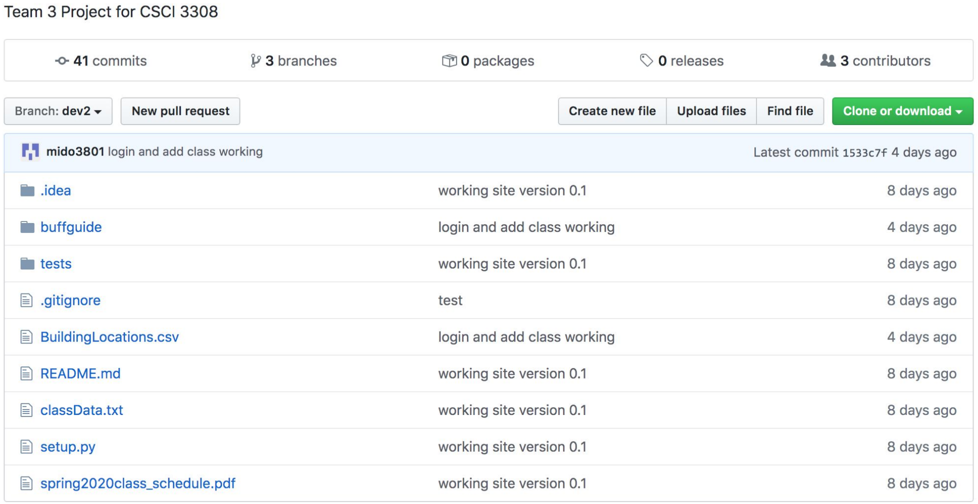


Color	Task	Start Date	End Date	Progress
Project: Lead Pigeon				
Pu	User Interface	2/18/2020	2/25/2020	0%
Pi	Edge Database	2/25/2020	3/17/2020	0%
G	Class Database	3/17/2020	3/11/2020	
R	User Database	3/24/2020	3/20/2020	
G	Node Database	3/10/2020	3/17/2020	
Bu	Web Scraping	3/19/2020	4/2/2020	
Bu	Map Display	4/2/2020	4/15/2020	
Pu				

Challenges

- 4 weeks into project, we realized we were following Waterfall methodology instead of original idea of using Agile methodology.
    - Was more ideal for our design strategy
- Deploying Google API’s on website:
    - Embedded google map (feature)
    - Marker Clustering (testing)
    - Directions API (feature)
- **Covid - 19 (global pandemic)**

Version Control : Github



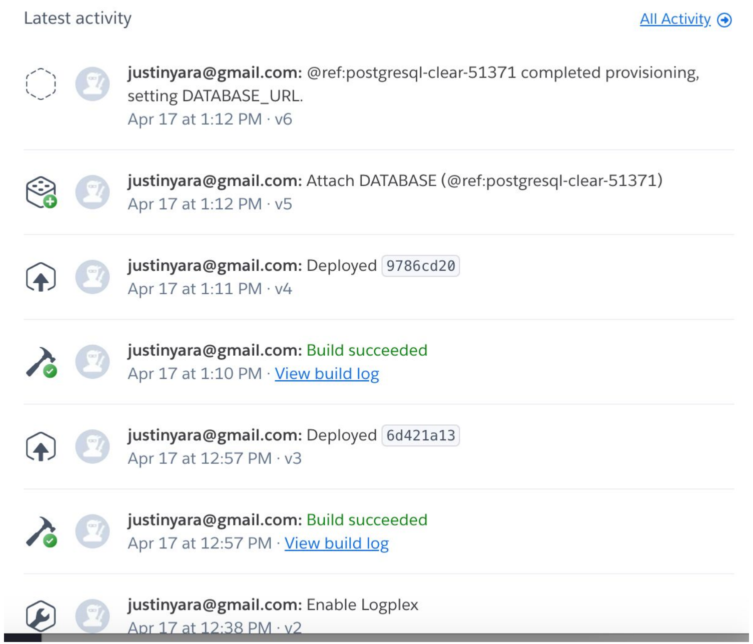
Team 3 Project for CSCI 3308

mido3801 login and add class working — Latest commit 1533c7f 4 days ago

.idea	working site version 0.1	8 days ago
buffguide	login and add class working	4 days ago
tests	working site version 0.1	8 days ago
.gitignore	test	8 days ago
BuildingLocations.csv	login and add class working	4 days ago
README.md	working site version 0.1	8 days ago
classData.txt	working site version 0.1	8 days ago
setup.py	working site version 0.1	8 days ago
spring2020class_schedule.pdf	working site version 0.1	8 days ago

Framework : Flask

Web Server: Heroku Platform



Latest activity

All Activity

justinyara@gmail.com: @ref:postgresql-clear-51371 completed provisioning, setting DATABASE_URL.
Apr 17 at 1:12 PM · v6

justinyara@gmail.com: Attach DATABASE (@ref:postgresql-clear-51371)
Apr 17 at 1:12 PM · v5

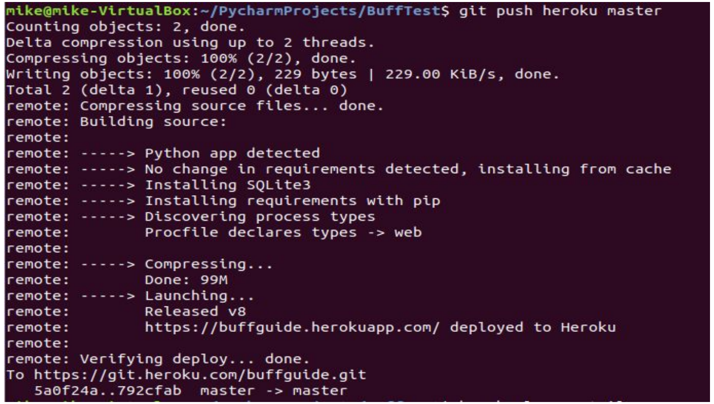
justinyara@gmail.com: Deployed `9786cd20`
Apr 17 at 1:11 PM · v4

justinyara@gmail.com: Build succeeded
Apr 17 at 1:10 PM · View build log

justinyara@gmail.com: Deployed `6d421a13`
Apr 17 at 12:57 PM · v3

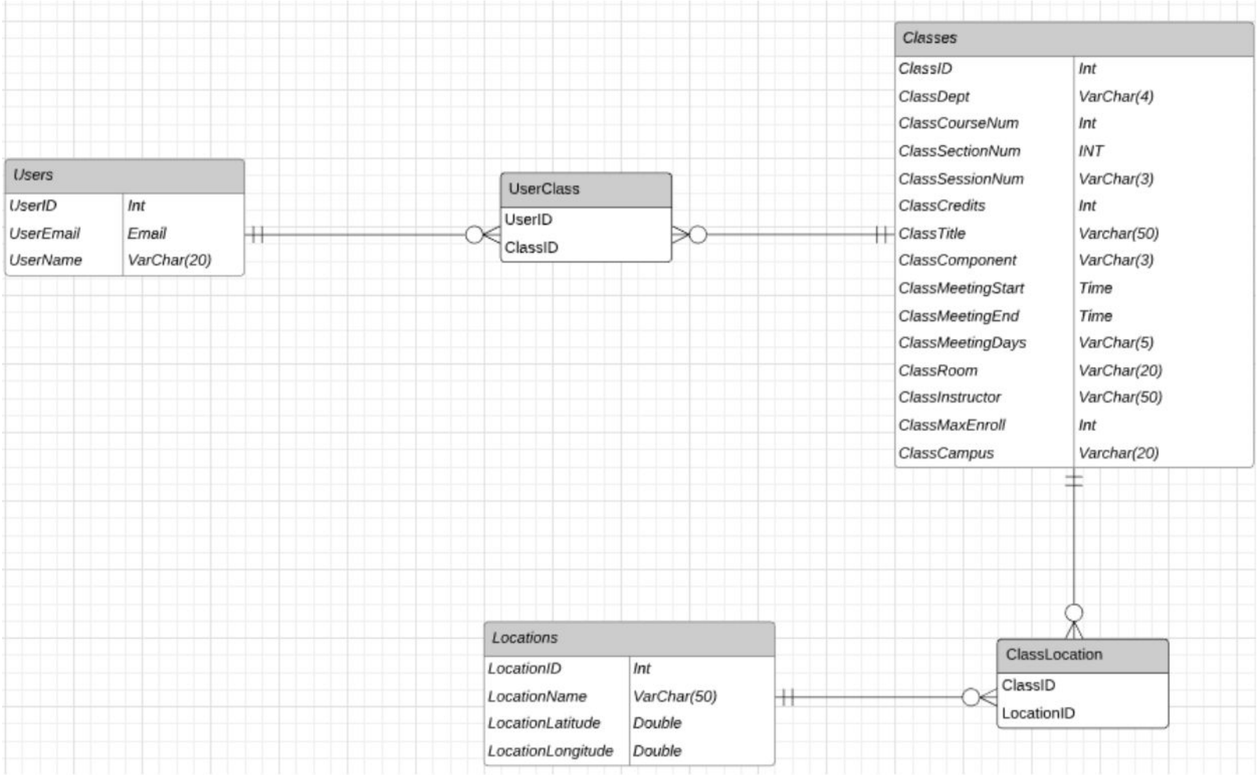
justinyara@gmail.com: Build succeeded
Apr 17 at 12:57 PM · View build log

justinyara@gmail.com: Enable Logplex
Apr 17 at 12:38 PM · v2



```
mike@mike-VirtualBox:~/PycharmProjects/BuffTest$ git push heroku master
Counting objects: 2, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 229 bytes | 229.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Python app detected
remote: -----> No change in requirements detected, installing from cache
remote: -----> Installing SQLite3
remote: -----> Installing requirements with pip
remote: -----> Discovering process types
remote:        Procfile declares types -> web
remote:
remote: -----> Compressing...
remote:        Done: 99M
remote: -----> Launching...
remote:        Released v8
remote:        https://buffguide.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/buffguide.git
   5a0f24a..792cfab  master -> master
```

Database : SQLite



Users	
UserID	Int
UserEmail	Email
UserName	VarChar(20)

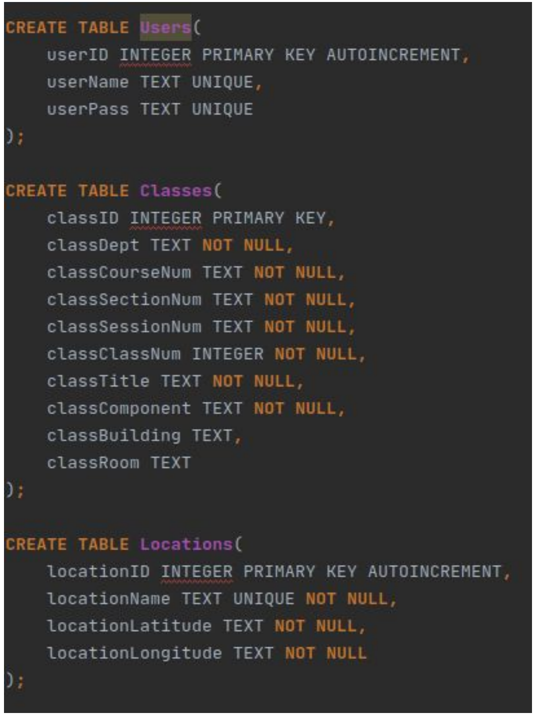
UserClass
UserID
ClassID

Classes	
ClassID	Int
ClassDept	VarChar(4)
ClassCourseNum	Int
ClassSectionNum	INT
ClassSessionNum	VarChar(3)
ClassCredits	Int
ClassTitle	Varchar(50)
ClassComponent	VarChar(3)
ClassMeetingStart	Time
ClassMeetingEnd	Time
ClassMeetingDays	VarChar(5)
ClassRoom	VarChar(20)
ClassInstructor	VarChar(50)
ClassMaxEnroll	Int
ClassCampus	Varchar(20)

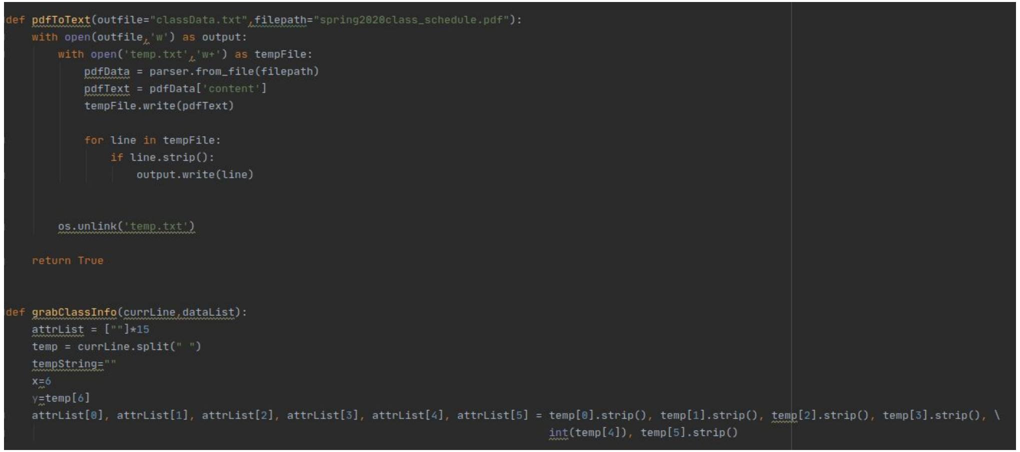
Locations	
LocationID	Int
LocationName	VarChar(50)
LocationLatitude	Double
LocationLongitude	Double

ClassLocation
ClassID
LocationID

Class and Location Database



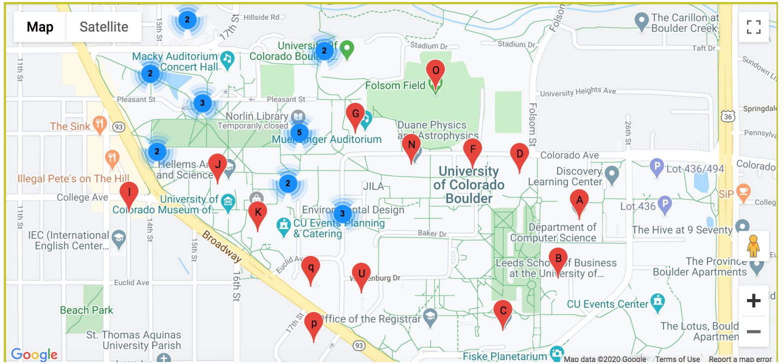
```sql
CREATE TABLE Users(
    userID INTEGER PRIMARY KEY AUTOINCREMENT,
    userName TEXT UNIQUE,
    userPass TEXT UNIQUE
);

CREATE TABLE Classes(
    classID INTEGER PRIMARY KEY,
    classDept TEXT NOT NULL,
    classCourseNum TEXT NOT NULL,
    classSectionNum TEXT NOT NULL,
    classSessionNum TEXT NOT NULL,
    classClassNum INTEGER NOT NULL,
    classTitle TEXT NOT NULL,
    classComponent TEXT NOT NULL,
    classBuilding TEXT,
    classRoom TEXT
);

CREATE TABLE Locations(
    locationID INTEGER PRIMARY KEY AUTOINCREMENT,
    locationName TEXT UNIQUE NOT NULL,
    locationLatitude TEXT NOT NULL,
    locationLongitude TEXT NOT NULL
);
```



```python
def pdfToText(outfile="classData.txt",filepath="spring2020class_schedule.pdf"):
    with open(outfile,'w') as output:
        with open('temp.txt','w+') as tempFile:
            pdfData = parser.from_file(filepath)
            pdfText = pdfData['content']
            tempFile.write(pdfText)

            for line in tempFile:
                if line.strip():
                    output.write(line)


        os.unlink('temp.txt')

    return True


def grabClassInfo(currLine,dataList):
    attrList = [""]*15
    temp = currLine.split(" ")
    tempString=""
    x=6
    y=temp[6]
    attrList[0], attrList[1], attrList[2], attrList[3], attrList[4], attrList[5] = temp[0].strip(), temp[1].strip(), temp[2].strip(), temp[3].strip(), \
                                                                                   int(temp[4]), temp[5].strip()
```

Google API's:

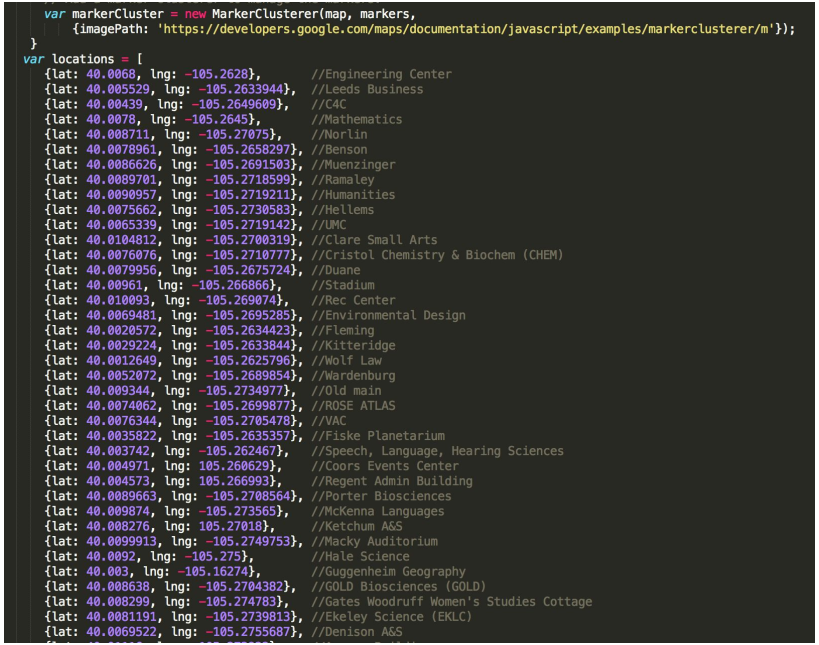
Directions


Map
Satellite
Macky Auditorium Concert Hall
University of Colorado Boulder
Folsom Field
Norlin Library
Temporarily closed
Duane Physics and Astrophysics
Muenzinger Auditorium
The Sink
Illegal Pete's on The Hill
Hellems Arts and Science
University of Colorado Museum of...
College Ave
IEC (International English Center...
Environmental Design
CU Events Planning & Catering
JILA
University of Colorado Boulder
Colorado Ave
Discovery Learning Center
Department of Computer Science
Leeds School of Business at the University of...
CU Events Center
Office of the Registrar
Beach Park
St. Thomas Aquinas University Parish
Fiske Planetarium
The Carillon at Boulder Creek
Lot 436/494
Lot 436
The Hive at 9 Seventy
The Province Boulder Apartments
The Lotus, Boulder Apartments
Broadway
Euclid Ave
Baker Dr
Stadium Dr
Pleasant St
Hillside Rd
Folsom St
University Heights Ave
Google
Map data ©2020 Google
Terms of Use
Report a map error

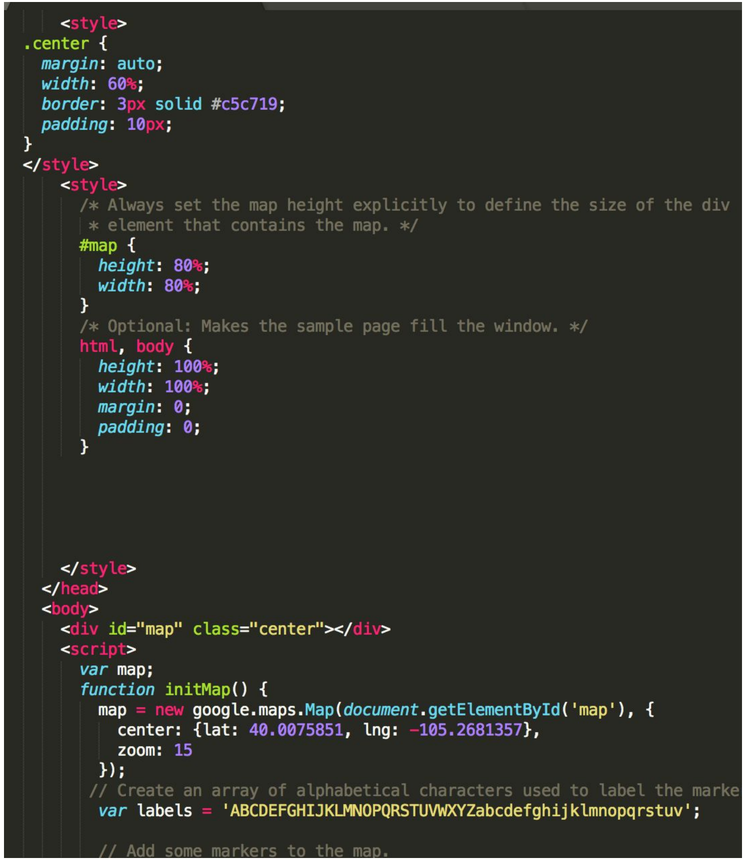
Marker Clustering

Google Maps

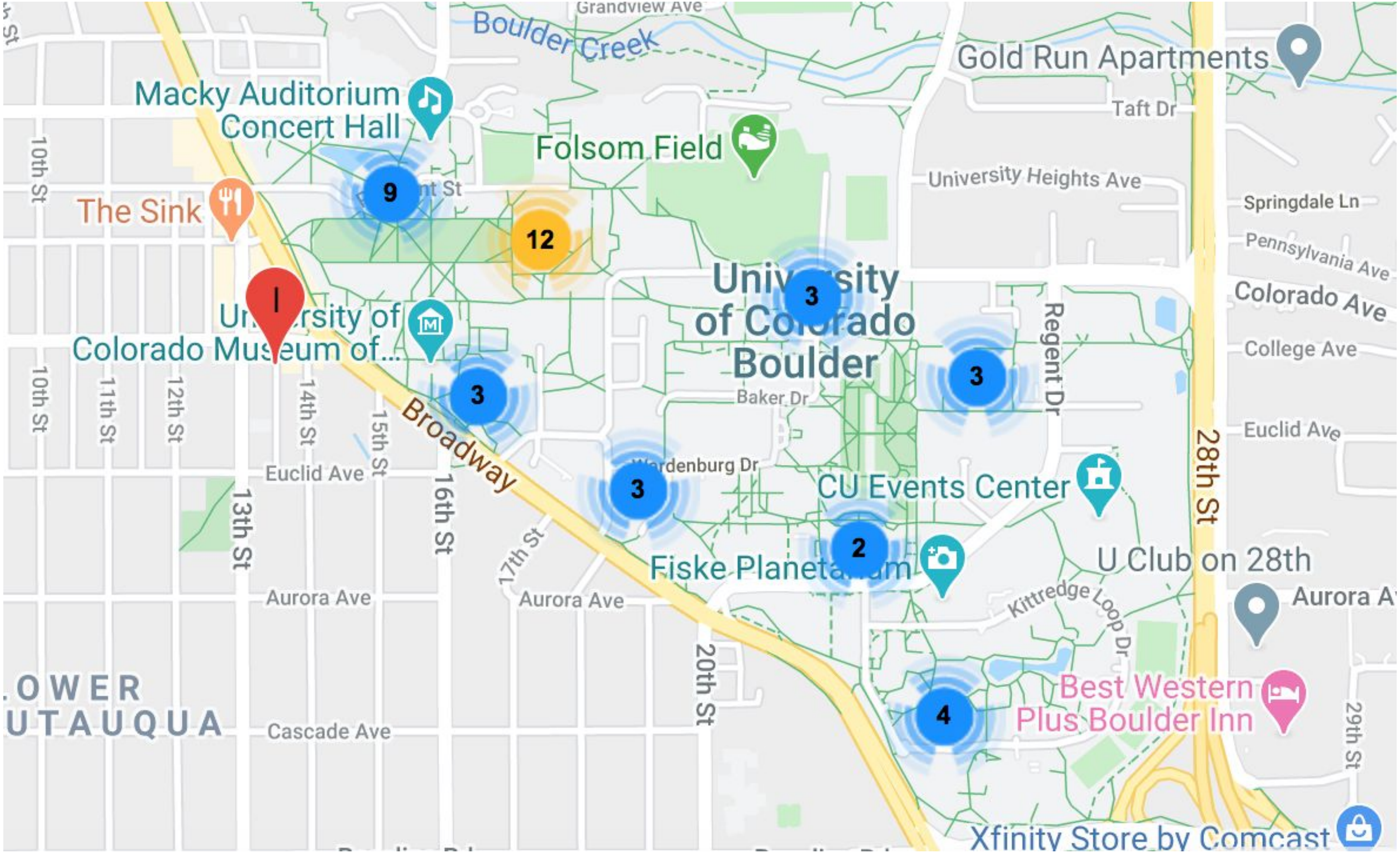
Marker Cluster API

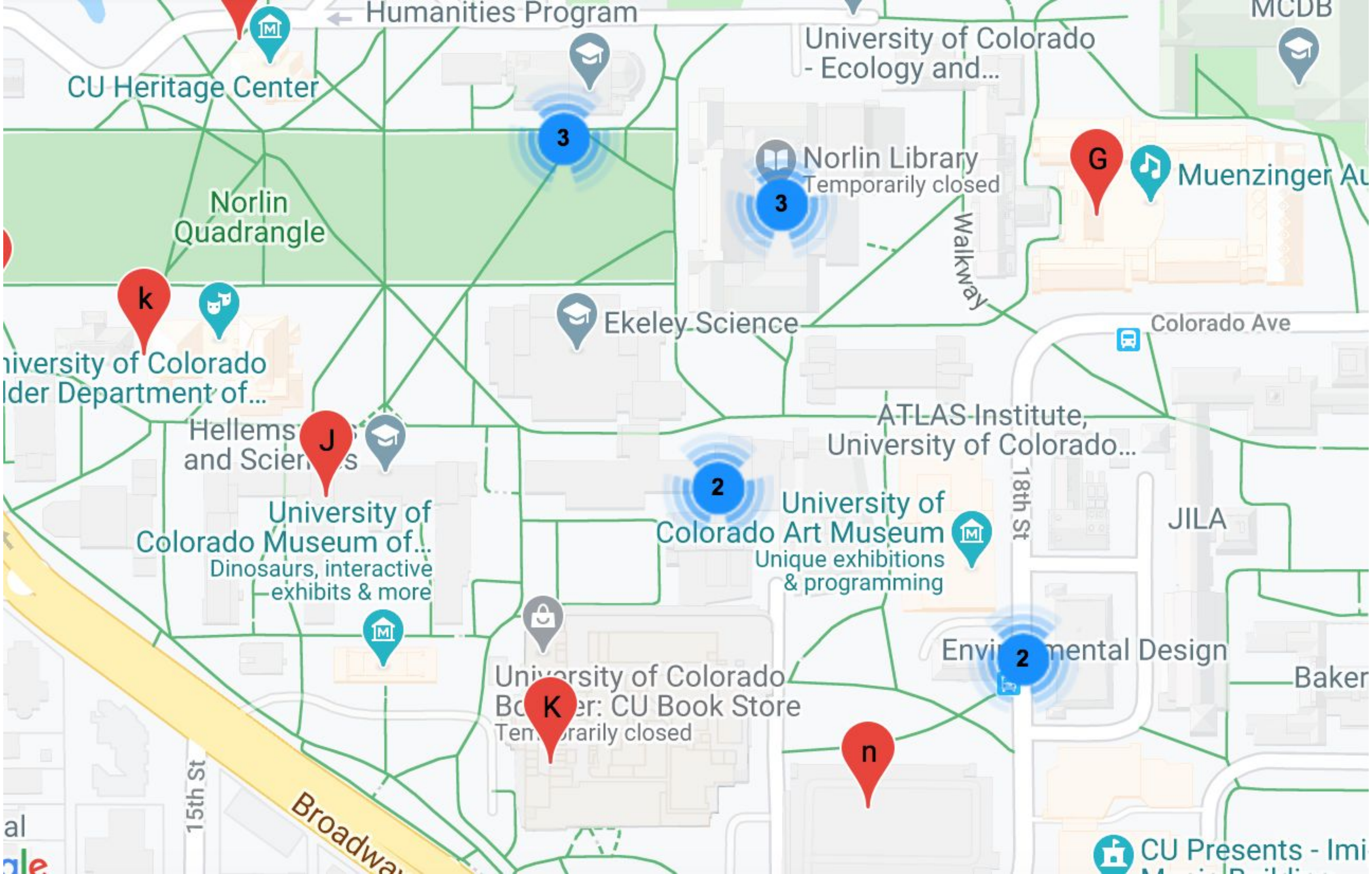


```
    var markerCluster = new MarkerClusterer(map, markers,
        {imagePath: 'https://developers.google.com/maps/documentation/javascript/examples/markerclusterer/m'});
  }
var locations = [
    {lat: 40.0068, lng: -105.2628},        //Engineering Center
    {lat: 40.005529, lng: -105.2633944},  //Leeds Business
    {lat: 40.00439, lng: -105.2649609},   //C4C
    {lat: 40.0078, lng: -105.2645},        //Mathematics
    {lat: 40.008711, lng: -105.27075},    //Norlin
    {lat: 40.0078961, lng: -105.2658297}, //Benson
    {lat: 40.0086626, lng: -105.2691503}, //Muenzinger
    {lat: 40.0089701, lng: -105.2718599}, //Ramaley
    {lat: 40.0090957, lng: -105.2719211}, //Humanities
    {lat: 40.0075662, lng: -105.2730583}, //Hellems
    {lat: 40.0065339, lng: -105.2719142}, //UMC
    {lat: 40.0104812, lng: -105.2700319}, //Clare Small Arts
    {lat: 40.0076076, lng: -105.2710777}, //Cristol Chemistry & Biochem (CHEM)
    {lat: 40.0079956, lng: -105.2675724}, //Duane
    {lat: 40.00961, lng: -105.266866},    //Stadium
    {lat: 40.010093, lng: -105.269074},   //Rec Center
    {lat: 40.0069481, lng: -105.2695285}, //Environmental Design
    {lat: 40.0020572, lng: -105.2634423}, //Fleming
    {lat: 40.0029224, lng: -105.2633844}, //Kitteridge
    {lat: 40.0012649, lng: -105.2625796}, //Wolf Law
    {lat: 40.0052072, lng: -105.2689854}, //Wardenburg
    {lat: 40.009344, lng: -105.2734977},  //Old main
    {lat: 40.0074062, lng: -105.2699877}, //ROSE ATLAS
    {lat: 40.0076344, lng: -105.2705478}, //VAC
    {lat: 40.0035822, lng: -105.2635357}, //Fiske Planetarium
    {lat: 40.003742, lng: -105.262467},   //Speech, Language, Hearing Sciences
    {lat: 40.004971, lng: 105.260629},    //Coors Events Center
    {lat: 40.004573, lng: 105.266993},    //Regent Admin Building
    {lat: 40.0089663, lng: -105.2708564}, //Porter Biosciences
    {lat: 40.009874, lng: -105.273565},   //McKenna Languages
    {lat: 40.008276, lng: 105.27018},     //Ketchum A&S
    {lat: 40.0099913, lng: -105.2749753}, //Macky Auditorium
    {lat: 40.0092, lng: -105.275},         //Hale Science
    {lat: 40.003, lng: -105.16274},        //Guggenheim Geography
    {lat: 40.008638, lng: -105.2704382},  //GOLD Biosciences (GOLD)
    {lat: 40.008299, lng: -105.274783},   //Gates Woodruff Women's Studies Cottage
    {lat: 40.0081191, lng: -105.2739813}, //Ekeley Science (EKLC)
    {lat: 40.0069522, lng: -105.2755687}, //Denison A&S
```

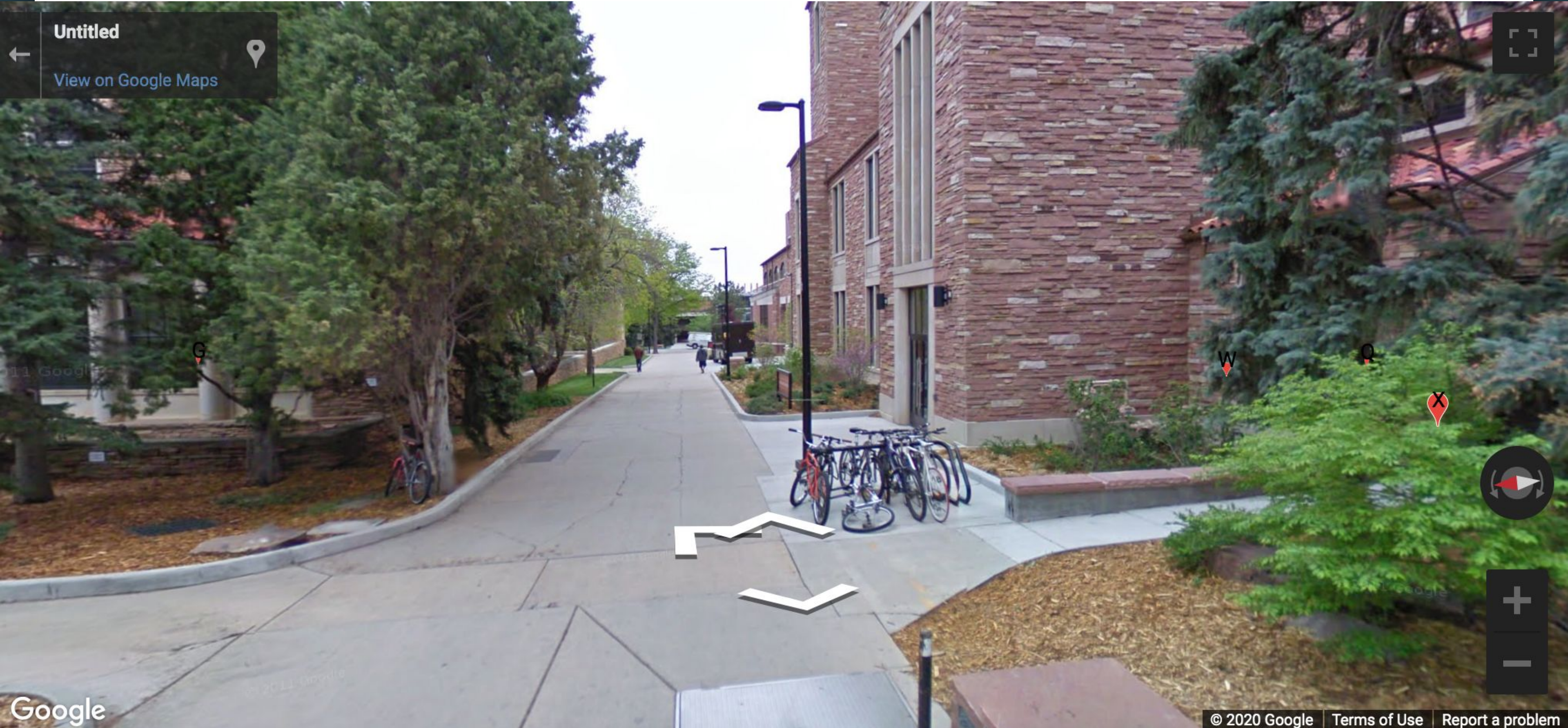


```
    <style>
.center {
  margin: auto;
  width: 60%;
  border: 3px solid #c5c719;
  padding: 10px;
}
</style>
    <style>
      /* Always set the map height explicitly to define the size of the div
       * element that contains the map. */
      #map {
        height: 80%;
        width: 80%;
      }
      /* Optional: Makes the sample page fill the window. */
      html, body {
        height: 100%;
        width: 100%;
        margin: 0;
        padding: 0;
      }




    </style>
  </head>
  <body>
    <div id="map" class="center"></div>
    <script>
      var map;
      function initMap() {
        map = new google.maps.Map(document.getElementById('map'), {
          center: {lat: 40.0075851, lng: -105.2681357},
          zoom: 15
        });
       // Create an array of alphabetical characters used to label the marke
        var labels = 'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuv';

        // Add some markers to the map.
```

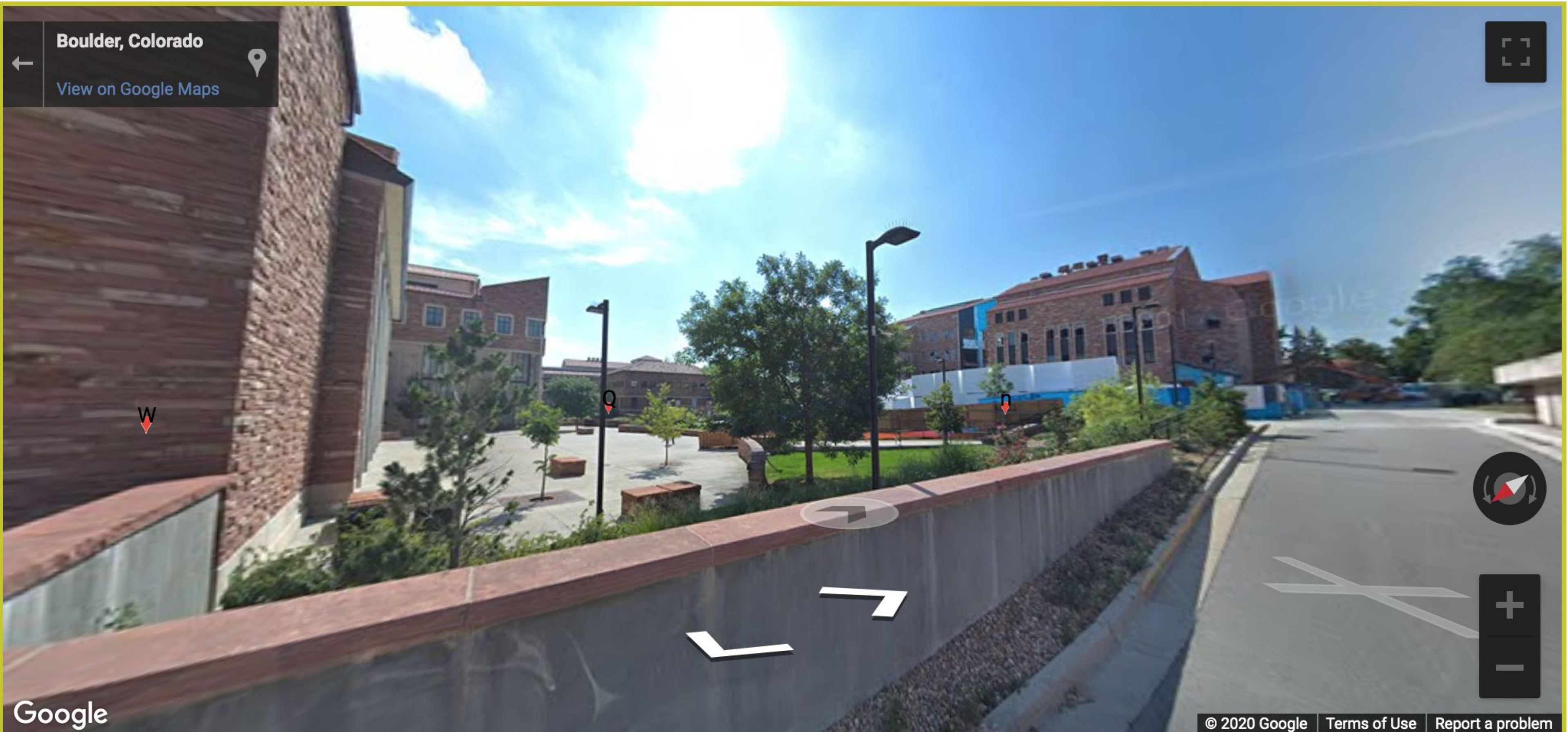

Grandview Ave
Boulder Creek
Gold Run Apartments
Taft Dr
Macky Auditorium Concert Hall
Folsom Field
University Heights Ave
Springdale Ln
Pennsylvania Ave
The Sink
9
12
University of Colorado Boulder
Colorado Ave
College Ave
University of Colorado Museum of...
3
3
3
Regent Dr
Baker Dr
Euclid Ave
10th St
11th St
12th St
14th St
15th St
Broadway
Euclid Ave
Wardenburg Dr
3
CU Events Center
28th St
13th St
16th St
2
Fiske Planetarium
U Club on 28th
17th St
Aurora Ave
Aurora Ave
Kittredge Loop Dr
Aurora Av
20th St
4
Best Western Plus Boulder Inn
LOWER CHAUTAUQUA
Cascade Ave
29th St
Xfinity Store by Comcast


Humanities Program
CU Heritage Center
University of Colorado - Ecology and...
MCDB
3
Norlin Library
Temporarily closed
3
G
Muenzinger Au
Norlin Quadrangle
Walkway
k
Ekeley Science
Colorado Ave
iversity of Colorado
lder Department of...
Hellems
and Scien s
J
ATLAS Institute, University of Colorado...
2
University of Colorado Museum of...
Dinosaurs, interactive exhibits & more
University of Colorado Art Museum
Unique exhibitions & programming
18th St
JILA
Envi mental Design
2
Baker
University of Colorado Bo er: CU Book Store
Tem rarily closed
K
n
15th St
Broadway
al
CU Presents - Imi

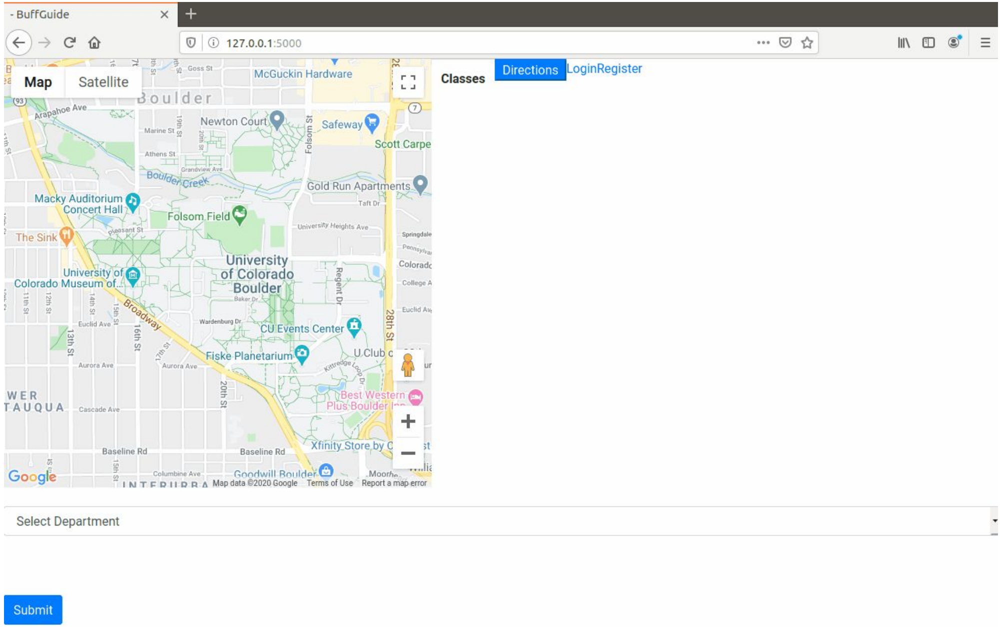
Marker Cluster API



Marker Cluster API



User Saved Classes


- BuffGuide
127.0.0.1:5000
Map
Satellite
Classes
Directions
LoginRegister
Boulder
McGuckin Hardware
Newton Court
Safeway
Scott Carpe
Boulder Creek
Gold Run Apartments
Macky Auditorium Concert Hall
Folsom Field
The Sink
University of Colorado Boulder
University of Colorado Museum of...
Broadway
CU Events Center
Fiske Planetarium
U Club
Best Western Plus Boulder Inn
Xfinity Store by C
Goodwill Boulder
Baseline Rd
28th St
Google
Map data ©2020 Google
Terms of Use
Report a map error
Select Department
Submit