Attractions App

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What is *Attractions*?

Attractions is an application that allows the user to quickly get more information on where they are and what they can do there

In its final form, it would be an extremely useful tool for tourists in order to quickly find out how to get to a certain attraction, or to find out more information about the current attraction that they are at

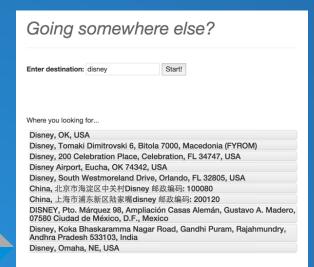
User Interface

Going somewhere else? Attractions You are currently at... Krummgasse 2, 56179 Vallendar, Germany Nearby attractions Kart-Center Anbetungskirche Pilgerzentrale Schönstatt Evangelische Kirchengemeinde Vallendar Lasertag-Center GmbH Koblenz St. Marzellinus und Petrus Dienstleistungen/Service rund um Haus und Garten

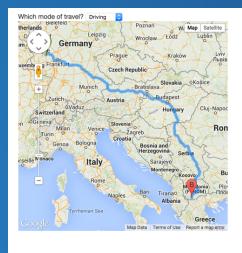
- Simple, clean, and easy to use
- Left panel allows user quickly see attractions near their area
- Right panel lets users enter a desired location and then see attractions near that area
- Bottom panel provides user with a map with directions to their desired location

User Interface contd.

 Upon entering a desired location, the right panel extends to show potential locations



 Selecting a location here brings up directions and more attractions:



Disney, Tomaki Dimitrovski 6, Bitola 7000, Macedonia (FYROM)

St.Naum of Ohrid	
Church of St. John at Kaneo	
Stadiumi Skënderbeu	
National Park Pelister	
Stadium Goce Delchev	
Stadium Biljana's Springs	
Katedralja Orthodhokse "Shen Gjergji"	
Prespa National Park	
Tumbe Kafe	
St. Clement of Ohrid	
National Park Galichica	

API Calls

Attractions has plenty of API calls to the <u>Google</u> <u>Maps/Places Library</u> throughout the code.

Using JavaScript, these calls are easily encapsulated within variables and objects.

- map = new google.maps.Map(document.getElementById('mapcanvas'), mapOptions);
- this variable encapsulates the map that we will reference by other variables and functions in order to place markers and directions on the map

API Calls contd.

```
function calcRoute() {
 if (typeof directionsDisplay !== 'undefined') {
   console.log('we already have directions!');
   directionsDisplay.setMap(null);
   directionsDisplay = undefined;
   $('#directions-panel').empty();
 directionsDisplay = new google.maps.DirectionsRenderer();
 directionsDisplay.setMap(map);
 directionsDisplay.setPanel(document.getElementById('directions-panel'));
 var selectedMode = $travelMode[0].value;
  var start = markers[0].position;
 var end = markers[1].position;
 clearMapOfMarkers();
  var request = {
   origin:start,
   destination:end,
   travelMode: google.maps.TravelMode[selectedMode],
 };
 directionsService.route(request, function(response, status) {
    if (status == google.maps.DirectionsStatus.OK) {
     console.log("Directions reponse is: ");
     console.log(response);
     directionsDisplay.setDirections(response):
   } else {
     alert('Sorry, I couldn\'t find any routes for that method of travel.');
```

- This function uses predefined markers set by the user's location and the destination location to calculate a route and display it on the map
- It uses the DirectionsRenderer constructor from the Google Maps API

API Calls contd.

Using the API is simple, but can be confusing if you don't know where to start

- 1) Start the API service and obtain your data:
- 2) Pass your request and callback

```
var service = new google.maps.places.PlacesService(map);

var lat = place.geometry.location.k;
var lng = place.geometry.location.D;
var latlng = new google.maps.LatLng(lat, lng);

var request = {
   location: latlng,
   radius: '50000',
   types: ['amusement_park','campground','church','park','stadium'],
};
```

```
function tcallback(results, status) {
    $resultsDiv = $('div.partyTest');
    $newPlaceResults = $('<div>'/div>');
    $newPlaceResultsHeading = $('<h2>'+placeName+'</h2>');
    $resultsDiv.append($newPlaceResultsHeading);

if (status == google.maps.places.PlacesServiceStatus.OK) {
    for (var i = 0; i < results.length; i++) {
        var place = results[i];
        // display place in `nearbyAttractionsUl`
        $nameSpan = $('<span class="attraction-name">'+place.name+'</span>');
        $newPlaceResults.append($nameSpan);
    }
}
console.log($newPlaceResults);
$resultsDiv.append($newPlaceResults);
}
```

Limitations of the application

Attractions isn't built using a framework, just vanilla JavaScript, so the code became scrambled really quickly

This means that if we were to add new functionality or replace old functionality, we risk breaking crucial parts of the app and having to debug every piece of the code to see what is going wrong

If we used a framework such as Backbone.js, the application would be much more maintainable