**STEP 1: FORM**

Create a basic form similar to this (does not need to look like this):



**Step 2: API CALL**

When the button is clicked send the data to an API to find address information.

|  |  |
| --- | --- |
| **End Point** | * https://validid-dev.navigatorsurveys.com/api/test/address |
| **Parameters** | * street * city * state |
| **Example** | * https://validid-dev.navigatorsurveys.com/api/test/address?street=1500 West 3rd Street&city=Cleveland&state=Oh |
| **Headers** | * clientId: d4aa6891-1b2c-470d-1fa6-08d824b9eaef * clientSecret: 660ffdf5-28e9-4f5b-a8b5-3321b015f11a |
| **Output** | * See Next page for sample output |

**Step 3: DISPLAY RESULT**

When the API returns the result you should calculate and display the following:

1. The Zip code found by the API
2. The local time at that location using the utc\_offset returned from API call
3. The delivery\_line\_1 in uppercase and the words in reverse order
4. The time in ms that it took to execute the API call
5. The latitude and longitude rounded to 2 decimal places
6. The lowest number between 1 and 50 that the delivery\_point\_barcode can be evenly divided by (if any). For example if the delivery\_point\_barcode is 16736085 then the answer is 3.

**EXTRAS (if time permits)**

1. For #6 above see if there is any way to optimise the code – better than looping ~50 times
2. Creating this as an angular application
3. Showcase any CSS design elements
4. Calculate the distance between the returned location and another location (e.g. your own location or the location of a different landmark)

**NOTES**

1. You can use any libraries you wish when running this
2. If you have any questions or issues feel free to ask
3. The code should be sent to me in advance of our meeting where we will discuss the approach taken.

**SAMPLE API OUTPUT (Using Cleveland Office address)**

[

    {

        "input\_index": 0,

        "candidate\_index": 0,

        "delivery\_line\_1": "1500 W 3rd St",

        "last\_line": "Cleveland OH 44113-1467",

        "delivery\_point\_barcode": "441131467991",

        "components": {

            "primary\_number": "1500",

            "street\_predirection": "W",

            "street\_name": "3rd",

            "street\_suffix": "St",

            "city\_name": "Cleveland",

            "default\_city\_name": "Cleveland",

            "state\_abbreviation": "OH",

            "zipcode": "44113",

            "plus4\_code": "1467",

            "delivery\_point": "99",

            "delivery\_point\_check\_digit": "1"

        },

        "metadata": {

            "record\_type": "H",

            "zip\_type": "Standard",

            "county\_fips": "39035",

            "county\_name": "Cuyahoga",

            "carrier\_route": "C022",

            "congressional\_district": "11",

            "building\_default\_indicator": "Y",

            "rdi": "Commercial",

            "elot\_sequence": "0214",

            "elot\_sort": "A",

            "latitude": 41.497360,

            "longitude": -81.695710,

            "precision": "Zip9",

            "time\_zone": "Eastern",

            "utc\_offset": -5,

            "dst": **true**

        },

        "analysis": {

            "dpv\_match\_code": "D",

            "dpv\_footnotes": "AAN1",

            "dpv\_cmra": "N",

            "dpv\_vacant": "N",

            "dpv\_no\_stat": "Y",

            "active": "Y",

            "footnotes": "H#N#"

        }

    }

]