

## Angular Challenge

Your challenge is to write a small Angular program that queries the location of the International Space Station (ISS) and displays it in a table.

The application should have a start/stop button to start the query.

The application should have an input to determine the time interval in seconds.

### API

You will be using the API from <https://wheretheiss.at/>, the API URL endpoint we wish you to use is:

<https://api.wheretheiss.at/v1/satellites/25544>

Here is a sample JSON payload:

```
{
  "name": "iss",
  "id": 25544,
  "latitude": -30.906274474527,
  "longitude": -27.11911519788,
  "altitude": 430.62271224516,
  "velocity": 27547.723365681,
  "visibility": "daylight",
  "footprint": 4561.1169698639,
  "timestamp": 1614952053,
  "daynum": 2459279.0746875,
  "solar_lat": -5.8258689765722,
  "solar_lon": 335.9684354905,
  "units": "kilometers"
}
```

### Output

We would like to see a dynamic table which shows the query date, altitude, velocity, and day number. (note the timestamp in the record is not usable)

Here is an example output screenshot.

Stop

Timer Interval

#	Altitude	Velocity	Day Numebr
2021-03-05T13:57:25.929Z	438.97	27529.51	2459279.08
2021-03-05T13:57:30.936Z	439.00	27529.45	2459279.08
2021-03-05T13:57:35.939Z	439.03	27529.40	2459279.08
2021-03-05T13:57:40.932Z	439.06	27529.34	2459279.08
2021-03-05T13:57:45.937Z	439.08	27529.29	2459279.08
2021-03-05T13:57:50.939Z	439.11	27529.24	2459279.08
2021-03-05T13:57:55.935Z	439.14	27529.20	2459279.08
2021-03-05T13:58:00.934Z	439.16	27529.15	2459279.08

## Functionality

We should be able to change the timer interval at will and start and stop the tracker.

## Formatting

Formatting can be plain old html so do not put too much time in to CSS, however should you have time, then go for it.

## Things we would like to see.

1. Services
2. Component variables linked to html controls.
3. Managing updates to arrays

## Tools

We would like you to write this using StackBlitz, this website provides you with a boilerplate Angular application and everything we ask for can be done and demonstrated here.

Things to note with StackBlitz - Timers:

1. If you use a timer, then due to the way Stackblitz auto compiles, your timers will duplicate. To overcome this, use a switch in your code to stop the API getting overused and you being locked out.
2. When you wish to use the Timer, refresh the browser and they will be cleared (save your work). You could of course keep tabs on timers too, should you have time.

## Presentation

When you have completed or your time has expired, then we would like you to demonstrate the application and walk us through the code.