I have implemented a fun project **“Air Traffic Controller”** and wanted to share with those who are looking to learn something new w.r.t HTML5, JavaScript and JSON data handling.

This sample project implements basic Air Traffic Controller and is implemented with HTML5, Java Script and static JSON Data and CSS for styling. (Currently it only implements Departures)

**Key highlights of the sample are to demonstrate –**

* Important new HTML5 standards like Audio API
* JavaScript based Event Handling.
* Using **SetInterval** and **SetTimeout** for timer based controls in UI thread in browser window.
* Using CSS for styling the Airport Gates, Runways and Side roads.

**Some of the Key Functionalities Include –**

* Total 5 Gates for Airports for planes to stand.
* Gates have Statuses as Open, Waiting and Departure and are shown on screen.
* Each Gate shows current Flight assigned details and Next Availability. (after 1 minute from current Departure)

* Total 4 Runways for 4 Planes to depart.
* At a time 4 flights can be departed since we have parallel 4 runways.
* Runway shows Flight Number and Next Availability. (after 1 minute from current Departure)

* After a particular flight Departs – that Gate and Runway is blocked for next 1 minute and system displays Next Availability for Gate and Runway on screen.
* Each flight is color coded with same color for Gate and Runway to make it clear which runway it will take. Also same can be checked via Flight Numbers on screen.
* JavaScript timers are run behind the scene and they control –
  + Opening Gates and Runways when they are open for any upcoming next flights.
  + To demonstrate JS animations using timers.
* HTML5 Audio API is integrated in the project – different audios are integrated with Plane movement to simulate actual flights.