Final Project Guidelines

You are free to create any sort of web application for your final project as long as it exercises the airline flight data API (see here for documentation: [http://comp426.cs.unc.edu:3001](http://comp426.cs.unc.edu:3001/)).

One obvious application would be a travel reservation app in which you can search for flights to / from different cities with different constraints (layovers, etc.) and book them to create new itineraries. You could also do some sort of air traffic control like application that visualizes which planes are in route to which cites at a particular time. Or maybe even a flight planning dashboard from the airline's point of view in order to add/remove flights, edit seat maps, etc. These are just a few ideas that I came up with off the top of my head. You are encouraged to be creative.

You may use third party JavaScript and CSS frameworks as you see fit. However, understand that you will be graded on what you wrote in order to make your project. In other words, if you use a CSS framework like Bootstrap in order make your project look nice, but all you really needed to do was use a few class names appropriately, I am not going to be using the fact that your project looks nice as a reason for giving you a good grade. On the other hand, if your project has a very nice design and you created that design from scratch developing a significant amount of CSS without the help of a framework, then that will very much be considered toward giving you a good grade.

Guidelines for what would get a passing (C or better) grade:

* Application loads as an HTML file with only one DOM load with everything else being done as a result of client-side programming.
* Retrieve and incorporate information from at least one endpoint in the API in the interface.
* At least one interactive feature in your interface that dynamically alters / updates the interface as a result of some user initiated action.
* At least use CSS (either rolled your own or from a framework), regardless of whether design is particularly good.

Guidelines for what would get a reasonable (B or better) grade:

* All of the above.
* Retrieve and incorporate information from at least three endpoints in the API.
* Create and update information on the backend to at least one endpoint in the API.
* Use CSS effectively (i.e., application looks / feels nice to use). CSS frameworks OK.

Guidelines for what would get a good (A- or better) grade:

* All of the above.
* Create and update information on the backend to at least three endpoints in the API.
* At least one live interactive feature. By this, I mean that the interface updates somehow as the user is doing something like typing, moving a slider or something like that (autocomplete, live update of list or visualization, etc.).
* Incorporating one or more third party APIs (Google Maps is an obvious one, Twitter?, Facebook?, SoundCloud?).
* Application has more than one "mode" (i.e., the interface gets torn down and rebuilt).
* Excellent design using a framework, or reasonable design rolling your own from scratch CSS.

These aren't hard and fast rules, but rather guidelines that should give you an idea of how good your project needs to be to get a particular grade. Your grade will also be affected by the quality of your presentation. You will be given approximately 10 minutes to present your final project.

Guidelines for your presentation:

* Everyone should have a speaking role.
* You should demonstrate the various features of your application, explaining which ones you found particularly challenging to implement and, if applicable, how you used any frameworks and/or 3rd party APIs.
* You should be able to answer questions about who did what.

Any and all resources (HTML page, CSS files, scripts, images, etc.) should be installed in a directory called "project" in one of your project members course web space. You can develop and even demo the app locally on your laptop and/or your own server or web host, but a working copy should also be in the course webspace.

Notes:

Flights API New User:

User: bryanAndNick

Pass: finalProject

Data:

* Created two airports, RDU and MCO
* Created plane “AA Airbus A320”
  + ID: 7649
  + Exclusively used on flights between RDU and MCO
* Created a flight that departs from RDU at 18:15 (6:15PM) and arrives at MCO at 20:00 (8:00PM)
  + Number: “AA 2667”
  + Plane used is the plane created above (ID: 7649)