# Module 4 Overview

This is our final module of the semester, for which you are responsible for developing a small web app based on the [New York Times Developers API](https://developer.nytimes.com/apis) (or another API of your choosing).

The process you will take to develop this web app includes three parts (milestones):

1. App brainstorming & mock-up creation
2. Development planning & strategy
3. Produce app

The second of these two milestones are similar to those used in the previous three modules. The first milestone (denoted milestone 0) is new and is explained in this document.

## Milestone 0 – Requirements

The overarching goal of milestone 0 is to develop a HTML mockup for your web app. The HTML mockup is a static HTML page – using appropriate HTML5 semantic tags and CSS for presentation – that demonstrates the intended layout for your web app. No JavaScript is required for the mockup, rather this mockup should present the opportunities for interaction that will be presented to the user by the web app.

The HTML mockup must include:

1. Proper semantic HTML5
2. Use CSS for styling and presentational components (do not use HTML for style!)
3. A header with a clear title for the web app
4. A body/content area with:
   1. clear opportunities for user interaction (i.e. input/search boxes; interactive components, such as maps; other interactive components as necessary)
   2. appropriate layout for all elements
   3. informational text as necessary
5. A footer with any necessary copyright or licensing information (see [New York Times Developer Terms of Service](https://developer.nytimes.com/terms), for example)

A few caveats:

* At this stage I am more concerned here with layout, readability, and a clear interaction model; I do not care as much about overall presentation or styling. With that in mind, do not spend overly much time on presentation – however, I do expect your site to be clean, usable and functional.
* Placeholder images are fine for both images and for interactive components.
* Text should **not** be placeholder – unless it is text that is meant to be derived from your chosen API. All necessary instructional text, as well as titles, footer, copyright, licensing, etc. should be present.
* Although presentation is not a main component here, consider taking a mobile-first approach with your design, and create mobile-, tablet- and desktop-sized version of your mockup. This will help you later on.

## Milestone 0 – NYT API (or other API) selection

For this project you must make use of the [New York Times Developers API](https://developer.nytimes.com/apis) (or another API of your choosing). Use of this API is authenticated through an API key and is governed by a [Terms of Service](https://developer.nytimes.com/terms). Your first step here must be to read the Terms of Service and to create an account so that you may generate an API key. Please read the Terms of Service carefully, but I will point out a few highlights:

* You must use *only* your own generated API keys, and only **one** key is permitted per application.
* You will not use the API for any commercial purpose, **or** in any product/service that competes with NYT.
* You will not exceed a *reasonable* request volume (note: it looks like they don’t explicitly state limits. As long as you’re not making more than a request per second, you’re probably fine).

The [API](https://developer.nytimes.com/apis) itself provides eleven main endpoints that can be used to find a wide variety of NYT content, including articles, user comments, and book and movie reviews. All data is returned as JSON (though be aware that some data can be large – see the Archive endpoint, for example). Each endpoint is well- and clearly documented.

Note that there is at least one deprecated API (Geo API). Please avoid any deprecated APIs or endpoints.

Note as well that to use any of the specific endpoints you must create separate API keys. Thus, if you would like to use the Books API you must have a Books API key. And remember as well that you can use only **one** API key per application. Thus, you will choose **only one** of the available endpoints for your web app.

## Milestone 0 – App ideas

The following is a list of possible web app ideas that you could consider for your project:

* An app that collates book reviews within a specific set of dates, or list categories (see /lists/names.json endpoint, for example).
* An app that collates movie reviews ordered by title or by critic name or perhaps within a particular genre.
* An app that collects the latest top stories in a particular section (e.g. arts, sciences, politics, etc.) and presents stories or headlines in an interesting way.
* If you have selected and API other than the NYT API, then any other app that would be appropriate

Or, you could take a more ‘avant-garde’ approach and try to use the data available in unusual ways:

* Most of the endpoints contain data for image urls. Perhaps you could create some sort of procedural collage of images, based on certain search criteria.
* Perhaps you could connect article headlines and titles (or perhaps authors) in some sort of interesting way that might say something about the state of reporting at the NYT over a short period of time (i.e. what do decontextualized headlines say about the author, authors, editor or publisher?)

The point is, that as you are developing your mockup you must have a clear understanding what your app is offering and to whom. In other words, you should be able to justify the *need* for your app based on your presumed audience. *To be clear*: This **does not** mean you need to have a *large* audience – you could have an audience of one, but that’s still enough of an audience to justify your app’s existence.

## Milestone 0 – Evaluation

I will be evaluating your web app mockup based on the following categories:

* **HTML code**: Have you used semantic HTML5? Is the code clear and well-organized? Have all requirements (see above) been included?
* **CSS code**: Have you used CSS exclusively for presentation? Is the CSS code clear and well-organized?
* **Layout**: Is the layout of your web app effective and appropriate for your intended use?
* **Interaction model**: Is there sufficient opportunity in the interaction model to make the app meaningful to the user?

Please use the space below and write a paragraph clearly explaining the purpose of your app and your development intentions:

|  |
| --- |
| My app is called Headline Hive. It is an app that collects the latest top stories in a particular section (e.g. arts, sciences, politics, etc.) and presents stories or headlines in an interesting way. My app will use the NY Times API particularly the Top Stories API.  Headline Hive app will have a hero image carousel that will show about 5 to 6 images using the home section of the Top Stories API. Below the Hero image will be category selector were a user can choose what category it wants to search. Bellow the category selector will be a search button that will fetch data from the API according to the category selected. These data like title, description, author, images and shortcut links to the actual news to the nytimes site will be displayed in a 3 column format for desktop and single column for mobile. The main purpose for the app is to act as a reference for people that want to search current headlines on the categories given by the app and the app will give the link to the news site if a user want to further more read about the story they are interested with. |