

Capstone Step 1

Initial Project Ideas

We have broken down the Capstone Project into easy-to-follow steps. Let's dive into Step One of your Capstone Project.

Please note that you will need approval from your Mentor to move on to the next step.

Project Instructions:

You'll pick up to 3 project ideas to propose to your mentor and the Springboard community. You'll also explore some potential APIs.

The first step of your capstone involves brainstorming the kinds of sites you'd like to build and exploring available APIs. If you would like, you can also create your own API.

Where Will You Find Your Data?

There are many options on how to handle data in your application. If you want to pull data from an external resource you may use an external API to do the heavy lifting there. You may also build your own extensive API to handle all requests of your app, you may also choose to do a combination of both.

For example let's say we have the following project ideas:

1. An application which will track your watchlist for shows and movies.
 - In this case we can use an external API to query data for movies and/or tv shows
 - We can also have our own endpoints to register/login, save favorites, add things to watchlist, mark movies as done, etc.
 - In the end we would be using an external API to get the data, and our own

API endpoints to add functionality to our application

2. A Facebook for Dogs (Dogbook) application

- In this case we would have to design our own API with lots of endpoints
- These would include login routes, adding friends, adding/editing profiles, adding comments, posts, likes etc. Our own API does the heavy lifting here.
- As a bonus you could leverage the GoogleMaps API to find the nearest dog park.

Each approach has its own merits and challenges. Communicate your ideas with your mentor on whether you want to use an external API to do most of the lifting, design your own or mix-in both.

Please note that you won't need to finalize your choice of API until Step Three. For this step, we want you to explore available APIs to get a sense of the kind of data you can choose to work with, which should help to inform the project ideas you come up with. Think about what kind of website you'd like to make, the functionality it will have, and the features you'd like to incorporate into it. As you've already done this once, push yourself further in terms of scoping.

- We suggest you restrict your search to APIs that are free to access (happily, there are thousands available!).
- Get started with this APIs List but feel free to explore other resources too
- Consider using an API provided by a major tech company, such as Apple Music's API. If a company you are interested in working at has a publicly available API, consider building your Capstone based off of it. That way, if you were to interview there, you would have the benefit of more intimate knowledge of their product.
- Making your own API is an excellent and challenging option, and will be a good thing to talk about in an interview

Identifying Initial Project Ideas

Please come up with three project ideas for sites you'd like to build. These should be a bit more complex than the projects you have done so far. Refer to the Project Overview document for examples. Please keep in mind that you are going to spend 4565 hours working on this capstone project. Be sure to reach out to your mentor if you're ever feeling stuck as you brainstorm.

Note: The goal of this project isn't to create something that's never been done before. We want you to work on a challenging project that will incorporate all of the full-stack skills you've been developing throughout the course. You can create a website similar to one that already exists, or use a popular API.

Submitting Your Ideas

- Write a short blurb in a google document explaining each of your ideas. Be sure to highlight the idea that you think you'd most like to work on. The blurb should, at a high level, describe the problem and the data you'll be using to solve it. At this point, there's no need to talk about specific tools and technologies.
- You can post your ideas, with a title, to your Slack community and solicit feedback from other students.
- Please create a GitHub repository for this Capstone Project and label it accordingly. All code and further documentation associated with this project should be added to this repository
- Submit your ideas to your mentor for review. Work with them to narrow in on the idea that you will move forward with.
- You will not be evaluated on this step. We encourage you to submit your project ideas so your mentor will have access to them when you discuss this during your regular calls. Meanwhile you can progress to the next unit.

PAUSE You will need a mentor's approval before moving on to the next step

Capstone Ideas

1. **An application which will track the movies you watch and will allow you to rate each film.**
 - **Can use an external API to query data for movies.**
 - **Can allow users to register/login, rate movies, mark as watched, add to watchlist, etc.**
 - **In the end this would use an external API to get the data, and our own API endpoints to add functionality to our application.**
2. **An application that will track NFL player and team stats.**
 - Can use an external NFL API for stats, schedules and player/team data.
 - Users can register/login, set favorite players/teams, make game predictions, etc.
3. **An application that provides random cat images and facts**
 - Can use external cat API to provide the data.
 - Users can register/login, see random cat images/facts, favorite cats, explore different cat breeds, etc.