

Capstone Project Requirements

1. Build a Project using six of each of the following lists:
 - a. Languages and Technologies
 - i. Python
 - ii. React
 - iii. Github
 - iv. Ajax
 - v. JSON
 - vi. CSS & Scss
 - vii. Data Types
 - viii. SQL
 - ix. Java Script
 - x. HTML
 - xi. UML
 - xii. UI/UX
 - b. Methodologies / Best Practices
 - i. Control Structures
 - ii. Algorithms
 - iii. Quality
 - iv. Project Management
 - v. Problem Solving
 - vi. Agile
 - vii. Object-Oriented Programming
 - viii. Functional Programming
 - ix. Software Engineering
 - x. Behavior Driven Development
 - xi. Test-Driven Development
 - xii. APIs
 - c. You must include one language/feature/framework you did not learn in the course (examples: search bars, payment process, picture carousel, etc.... **Be Creative**)
2. You can build a Microservice App Process
 - a. The backend is Python, Ruby or any other backend language.
 - b. The back end must be connected to the Front-End via API.

3. **Use your imagination to be creative and have fun with it.**
4. The App must be mobile responsive
 - a. Unless you can provide a good reason why it cannot be (ex: Browser-based video game)
5. Hosted on any hosting service
6. **You must submit the App URL, Github URL, passwords and usernames needed to test the application. All info must be submitted to anthony@bottega.tech.**
7. It will take approximately 2 - 3 days to review your code and make sure you have a functioning Application.
8. Do not be discouraged if we do not approve of your project right away. We will include in the email back to you what to add and what more we are wanting to see.
9. The mentors will be there to help you with some issues but this is a project you must do on your own with little support.

Here is a list of Approved Projects that you can choose from.

eCommerce - Build an online shop. User Story: A user can select from a set of products and walk through the full purchase process.

Modern Blog - Building a blog that allows for Omniauth and Elasticsearch. User Story: A user can create a blog account by logging in with one or more social accounts (Facebook, Twitter, GitHub, etc.) User Story: Visitors can search through content via Elasticsearch, including an auto-complete component.

Chat App - Build the key features utilized for chat functionality. User Story: A user can create a group chatroom and post messages in the group. User Story: A message is only shown in the group it has been posted in.

LMS - Rebuild DevCamp. User Story: A user can create a set of courses, organized by courses, sections, and guides.

Factory Automation System - Build an application that manages each state of a factory's manufacturing process. User Story: A digital production can be taken from one stage through a full workflow. E.g. A fleet management program where a vehicle can be added, then have a custom set of maintenance requirements added, then be assigned to a driver, all by different managers.

Have Fun and Good Luck!