



20) Capstone Project    Lesson

# Flask Capstone Checklist

6 min to complete · By Brandon Gigous

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In this lesson, you'll get a list of requirements for your Flask capstone project to ensure you meet the standard for graduation and receiving a course completion certificate. Make sure you include all of the elements below before submitting your capstone for review. We'll check your work, so no cutting corners! :)

This project will be all you. It should demonstrate clear comprehension of the course material, and ultimately become something you are truly proud of!

## Overarching Flask Project Requirements

- Your capstone project should be a Flask web app with a completely fresh and custom look and feel. Don't reuse old example projects or code written throughout

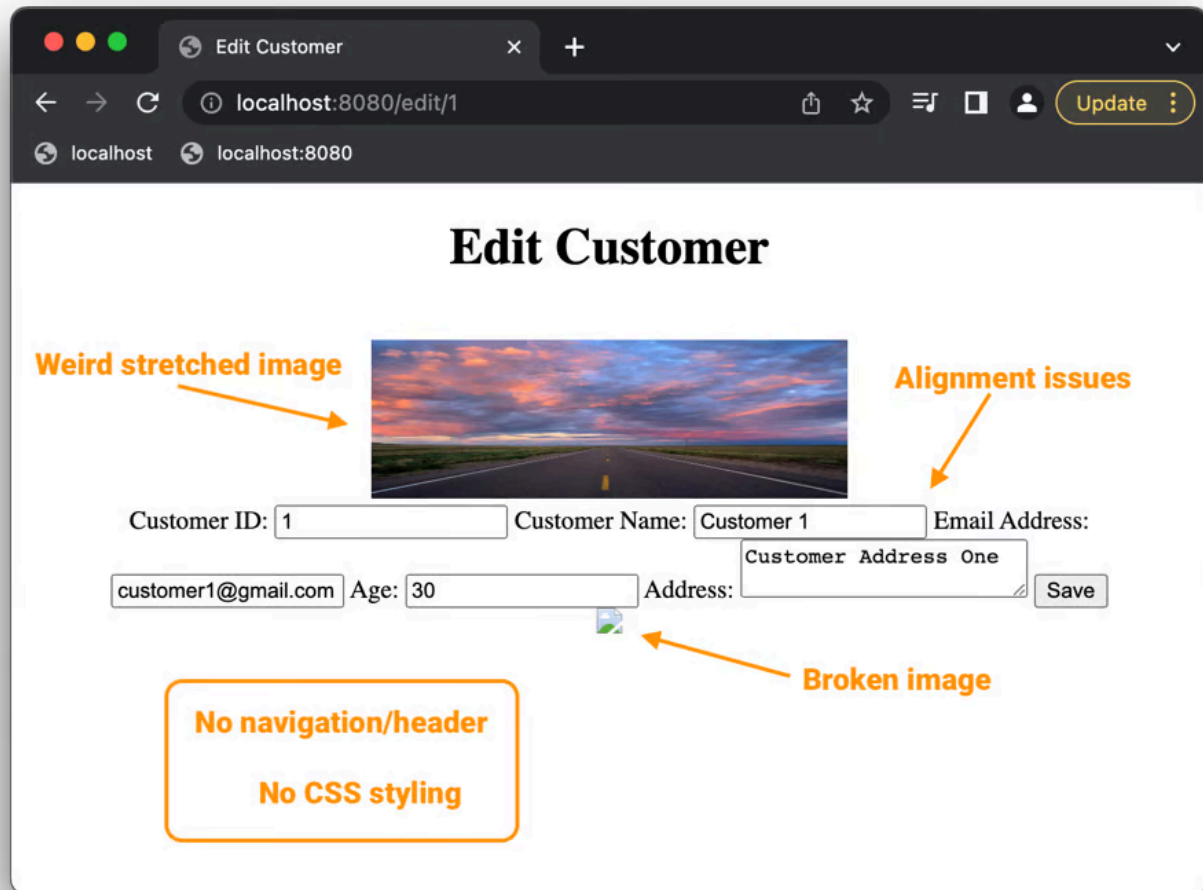
the course.

- Write each line of code with *intent*.
- This project should be created within its own GitHub repository.
- The repo should contain a README file that clearly describes in detail how to set up, run, and use the project (more on READMEs below).
- This project should demonstrate clean, organized code structure and abundant documentation.

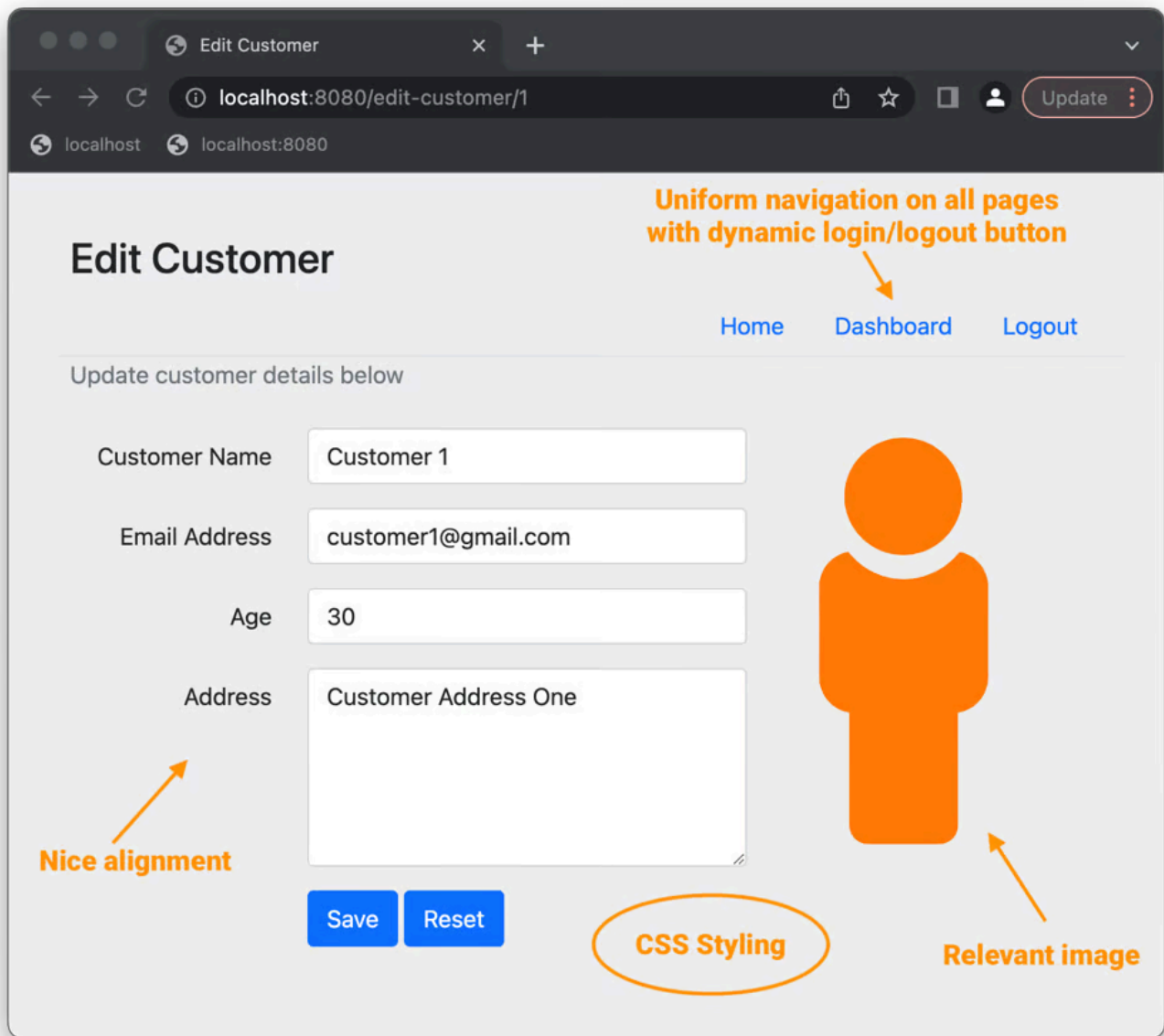
## Application Factory/Blueprints

- Fully functioning user interface.
  - Allowing someone to register and log in, then use the application as intended.
  - All visible buttons and links should be functional.
  - All images and other resources should be able to load successfully.
- Unified user interface.
  - Navigation, headers, etc. should be consistent across all pages.
  - All pages should share CSS styling (Bootstrap, custom, or other).
  - Each page should look like it belongs in the application.

Here is an example of a user interface that still needs some work:



Here is an example of a user interface that meets the requirements:



## Flask-SQLAlchemy Extension

- This application must use a database (other than Sqlite) with properly modeled relationships.

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## Flask-Login Extension

- This application must enable people to create accounts and log in (make sure to utilize password hashing!)
- Include several user profiles, each with different levels of authorization (permissions/user roles). For example:
  - Guest
  - User
  - Admin

## API

- This application must also function as a RESTful API, with the ability to GET or POST most objects/datamodels in the project.

## Exception/Error Handling

- Implement a custom error handler and pages.

## Deployment

- Project should be up and running and accessible for review at the location of your choice (Heroku, Linode, AWS, Azure, etc.)

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## Create a Capstone Project Readme

A part of every good project is a good [README](#) file where you describe what your project is about. Make sure that your capstone project has a good [README](#) file that anyone could read and get a good understanding of what your project is about. Not only that, they should be able to get your app running on their machine by following the instructions in your [README](#) file.

If you're new to READMEs, you can refer to CodingNomads' [README guidance from our Git & GitHub course](#).

Before sharing your project with other people, as well as showing it to potential employers, you should always include a good [README](#) .

# Summary: Python + Flask Capstone Project Checklist

## Requirements for your Flask capstone project:

- Your capstone should be a Python + Flask web app with a fresh, custom look and feel.
- Your project should be created within its own GitHub repository.
- The repo should contain a README file that clearly describes how to set up, run, and use the project.
- Your project should demonstrate clean, organized code structure and abundant documentation.

## Python + Flask technical elements to include:

- Application Factory/Blueprints
- Flask-SQLAlchemy Extension
- Flask-Login Extension
- API
- Exception/Error Handling
- Deployment

Alright, with guidance in hand, it's time to get started! Take your time and utilize all available resources to make this project something special. Think outside the box, think real-world. It's all been leading up to this, keep up the great work that has taken you this far! You got this!

[Previous](#)[Next → Share Your Project](#)

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