# CMPS 3680 Project 2

# Spring 2025

## Part 1 - Prerequisites

- For Project 2 you will be using the server you setup in Labs 7 and 8.
  If you have not completed those labs, it will be difficult for you to implement any additional server side tools or languages.
- If you intend to do a guide implementing a server process running on a specific internal port, you will need to use <a href="ProxyPass">ProxyPass</a> in your Apache config to direct requests appropriately. We went over this in the lab together, and I have provided documentation for this in Homework 9.

# Part 2 - Pick a Topic

For this assignment, you will be selecting a topic that relates to Server Side Web Development and doing a DEEP DIVE on that topic. This could be a server side scripting language, a serialization method, a security topic, a specific architecture, data storage options, etc.

#### **Some Examples Of Acceptable Topics:**

- 1. Create a guide to set up a simple http server in one of these popular server-side languages:
  - o PHP
  - o Python
  - Ruby
  - lava
  - Golang
- 2. Go deep on one of the following serialization formats or compare the pros and cons between them:
  - o JSON
  - SOAP / XML
  - BINARY
- 3. Create a guide to set up one of the following data storage solutions, or do a write up comparing them:
  - MySQL
  - PostgreSQL
  - o Redis
  - o MongoDB
- 4. Do a writeup on one of the following API/RPC methods, or a guide on how to implement one:
  - IsonRPC
  - REST
  - GraphQL
  - o gRPC

### Part 3 - Create A Guide or Write-up

Once you have chosen your topic, you have the choice of either creating a GUIDE or a WRITE-UP:

#### **SPECIFICATIONS FOR CREATING A GUIDE:**

- 1. This will be a step-by-step document that will guide the reader through a setup/implementation process.
- 2. The format for this guide will be similar to the way I have structured the **LABS** for this class.
- 3. Assume the reader has a basic server with Apache setup, but they know VERY LITTLE about your topic.
- 4. The steps should be as clear and concise as possible. Providing code snippets, screenshots, or additional context can really help the reader understand the process more clearly.
- 5. The guide should be 1-2 pages long and organized into sections & steps.

#### SPECIFICATIONS FOR CREATING A WRITE-UP:

- 1. Rather than a step-by-step document, a write-up is more INFORMATIONAL in nature.
- 2. The format for this write-up will be similar to the way I have structured the **HOMEWORKS** for this class.
- 3. Assume the reader has a solid technical background, but they know VERY LITTLE about your specific topic.
- 4. The information provided on your specific topic should be as clear and concise as possible. Remember, this is a technical write-up, not an English paper. Providing examples, links to external resources, and definitions can help reinforce the information you're attempting to convey to the reader.
- 5. The write-up should be 1-2 pages long and organized into logical sections.

#### Part 4 - SUBMISSION

- 1. Once you are done with your writeup, save/export the document as a PDF
- 2. Email your submission to wroyer@csub.edu
- 3. Format the subject line like this:

CMPS3680 - YOUR NAME - PROJECT2