CMPS 3680 Project 2

Spring 2024

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 ProxyPass 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. It could also be an existing topic that we have discussed in class that you would like to learn MORE about.

Some Examples Of Acceptable Topics:

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