**CSE 310 – Applied Programming**

**Module Plan**

Name: Ken Walters

Date: 2/27/2024

Module # (1-3): 1

1. Identify which module you have selected to work on. Place an “X” in front of your selected module.

Cloud Databases

Data Analysis

Game Framework

GIS Mapping

Mobile App

Networking

SQL Relational Databases

Web Apps

Language – C++

Language – Java

Language – Kotlin

Language – R

Language – Erlang

Language – JavaScript

Language – C#

Language - TypeScript

X Language – Rust

1. At a high level, describe the software you plan to create that will fulfill the requirements of this module. This may change as you learn more about the technology or language you are learning.

I will write a console program in Rust that solves some of the advent of code puzzles from 2022. See <https://adventofcode.com/2022> Solving these problems will give me opportunities to use variables, expressions, conditionals, loops and functions, and data structs.

1. Create a detailed schedule using the table below to complete your selected module during this Sprint. Include the task and duration for each day. You are expected to spend 24 hours every Sprint working on this individual module and other activities in the course. Time spent on this individual module should be **at least** 12 hours.

|  |  |  |
| --- | --- | --- |
|  | **First Week of Sprint** | **Second Week of Sprint** |
| **Monday** |  |  |
| **Tuesday** |  | Convert day 2 pseudo code to rust code (3 hours) |
| **Wednesday** | Read rust beginner docs, Install rust, setup in VS Code, helloworld in rust create github repo for the project. (3 hours) |  |
| **Thursday** | Read first advent of code day problem, write pseudo code to solve the problem (2 hours) | Make video with demo and code walk through and publish to youtube (1 hour) |
| **Friday** | Convert pseudo code for day 1 problem to rust (3 hours) | Create readme and submit document. Review code has all the required elements for the rust module (1 hour) |
| **Saturday** | Read second day advent of code problem. Create pseudo code for solution (2 hours) | Final push to github and submit document to canvas (.5 hour) |

Total of 15.5 hours scheduled.

1. Identify at least two risks that you feel will make it difficult to succeed in this module. Identify an action plan to overcome each of these risks.
2. Rust is new to me and I have heard memory management in rust is challenging to get used to. I will make sure to focus on the memory management features of rust early when reading the documentation and experiment with examples.
3. I could be taking on too much by trying to do two days worth of problems. If it takes me more time than I allocated to complete the day 1 problem, I can skip doing the day 2 problem.