**Technical Design Document Template**

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**Date Created:** 10/12/25

**Program Description:**

This program checks a user’s input to determine whether it is a valid phone number, social security number, or zip code.

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** phone num validate

**Description:** check if number is a valid phone number

**Parameters:** num, type

**Variables:** num, type, validnum1, validnum2

**Logical Steps:**

1. Establish validnum1 and validnum2 as patterns correlating to valid phone numbers
2. If num matches either pattern, set type to 1
3. Return type

**Returns:** type

2. **Function Name:** zip validate

**Description:** check if number is a valid zip code

**Parameters:** num, type

**Variables:** num, type, validnum1, validnum2

**Logical Steps:**

1. Establish validnum1 and validnum2 as patterns correlating to valid zip codes
2. If num matches either pattern, set type to 2
3. Return type

**Returns:** type

3. **Function Name:** ssn validate

**Description:** check if number is a valid social security number

**Parameters:** num, type

**Variables:** num, type, validnum1

**Logical Steps:**

1. Establish validnum1 as a pattern correlating to valid ssn
2. If num matches pattern, set type to 3
3. Return type

**Returns:** type

4**. Function Name:** main

**Description:** Main function that sets up a loop and calls other functions

**Parameters:** none

**Variables:** num (user input), type (type of number, returned by functions), cont (whether user wants to continue loop)

**Logical Steps:**

1. Initialize variables
2. Set up infinite while loop
3. Call various functions
4. Depending on type, print type of number (phone, zip, ssn)
5. Ask user if they want to continue
6. Continue loop if user desires

**Returns:** none

**Logical Steps:**

1. Call main()

**Link to your repository:** <https://github.com/AlexanderMasucci/COP2373>

**Output Screenshot: (make sure big enough so I can see**  
**A black screen with white lines

AI-generated content may be incorrect.**