1.Introduction

- Libraries in programming languages are collections of prewritten code that users can use to optimize tasks.

1.1 Background

Project Description

- CCPL is a Library. This library is created to help newcomers to achieve fundamentals of c programming and logic building with interactive GUI.

Project Duration
- 1 Month

Project Guide
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Platform
- Windows (10/11)
- Ubuntu

Technologies Used
- C language
- GTK
- Glade
- Git lab

Tools Used
- VS Code
- WSL

- The aim of this project is to apply Concepts of C Language to create GUI.

- Independence by using Individual Local header file.

- It was realized that CLI is not as engaging as that of a GUI.

- I came up with CCPL that will make learning C language easy and coding fun.

1.2 Objectives :

- Core2web C Programming Library is an application file designed primarily to achieve great learning experience by providing interactive GUI and it also provides detailed explanation about all C concepts.

- This library will allow the user to learn C concepts and practice it without any prerequisites.

- This library allows to quickly and easily manage inputs and uses less space complexity.

- The main point of developing this library to help students to overcome fear of pointers.

- Eliminate CLI and increase productivity.

- Increase coding practice and eliminate redundancy.
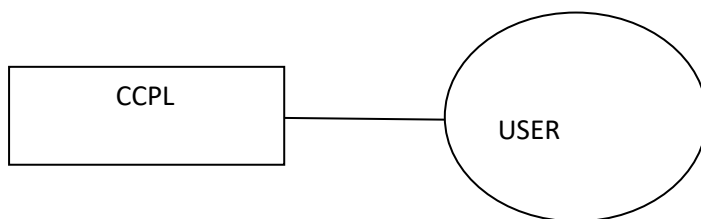
1.3 Purpose :

- This library enables users to learn concept of C language according to their comfort and time, select the concepts according to their preference from menu stack.

- By just selecting the concept that the user wants to have.

- User will have their own library that they can add their own function or rewrite a present function according to their comfort.

1.4 Scope of Library :

This CCPl is committed to being best in all areas of its business.

Core2web C Programming Library will be a library whose main language of programming will be C. Its main aim to simplify and improve the efficiency of learning process for students, minimize inputs as that of CLI and ensure data accuracy during function calls. Users will also be able to view C language menu.

MODULES :

➢ **Home :**

User can see CCPL details, menu etc.

➢ **C Concepts :**

User can see all conceptual part regarding C Language.

➢ **Number :**

User can practice various number types and see the code also download it.

➢ **Pattern :**

User can access various number of patterns available and practice it.
User is also able to add their pattern in local header.

➢ **Array :**

User can insert size of array and do operations which are available also analyse code by downloading it.

➢ **String :**

String in C known as array of characters which is defined in c concepts User can provide String of any type and perform respective operations.

➢ **Data Structure :**

User can select type of data structure for eg. Select type of linked list
There are 4 types of linked list user can select a type and perform operations.

❖ Scopes :

Scope and Limitation for Core2web C Programming Library is written in C language for every new user it needs to be compiled before use.