

ConOps

1.0 Introduction

1.1 Project Description

In this Project, we have written a C program that can delete a specific line from a file. Imagine you have a file with x number of the content, the program is going to ask for the line number to delete, and it is going to be able to delete that line number from the file. The idea of our program is creating a temporary file and read the data from the original file and write it in the temporary file except of the line that we do not need of course; after, the original file will be deleted and the temporary file will be named as original file.

1.1.1 Background

The program can be utilized and used for so many fields, there are a lot professionals who are emitting specific parts from a system and to do it efficiently we suggest our program.

1.1.2 Assumptions and Constraints

As we have limited size for the code, after some lines program will not work. Therefore, later it could be developed for bigger and more complicated files.

1.2 Overview of the Envisioned System

1.2.1 System Scope

System's size is no more than 3KB. It was used C programming language and the libraries `stdio.h`, `string.h`, `stdlib.h`, `stdbool.h`.

2.0 Documents

2.1 Applicable Documents

<https://drive.google.com/drive/u/2/folders/116rDdCe8LD9Yuq3CJm0b0ERphKhNRIVR>

<https://github.com/>

2.2 Reference Documents

https://www.youtube.com/channel/UC52tAgsocr9DgrPec_iw1eq

<https://www.learn-c.org/>

<https://www.geeksforgeeks.org/>

<https://www.tutorialspoint.com/null-pointer-in-c#:~:text=A%20null%20pointer%20is%20a,pass%20any%20valid%20memory%20address.>

<https://www.geeksforgeeks.org/bool-in-c/>

3.0 Description of Envisioned System

3.1 Needs, Goals and Objectives of Envisioned System

The goal of the system is to make the optimization work more efficient and faster. It is a struggle for a professional to emit certain parts of the project, therefore our idea is potential for making their jobs more easy-going. People are lazy, and are willing to do everything to shorten their work, therefore the program will have users if correctly utilized and improved.

3.2 Overview of System and Key Elements

This section describes at a functional level the various elements that will make up the system, including the users and operators. These descriptions should be implementation free; that is, not specific to any implementation or design but rather a general description of what the system and its elements will be expected to do. Graphics, pictorials, videos, and models may be used to aid this description.

3.3 Interfaces

The interface of the system includes data and user interactions. As we deal with the information of the picked files, the main operations will be done with that data.

3.4 Modes of Operations

The program has no need to take any configurations. All of the configurations related to the program were done and it is efficiently tested.

3.5 Proposed Capabilities

The system will provide an opportunity to change text files in short terms.

4.0 Physical Environment

The project is just a code written in C language so there should not be a problem with physical environment that the project will be used at. Of course, every case is specific, but for this program the physical environment is not a problem.

5.0 Support Environment

Applied to computer programs, resources are data files that accompany a program's executable code. Resources simplify the code you have to write by moving the creation of complex sets of data or graphical content outside of your code and into more appropriate tools. But this should be familiar for every company that is implying this system. There should be only minimal support, by context of testing, utilizing the program but no more than that.

6.0 Operational Scenarios, Use Cases and/or Design Reference Missions

Conditions

The project as we see can be applied for example in accounting. You can apply this system when some parts of the final financial statement are needed to get rid off accountant can use this program and simplify the task.

7.0 Impact Considerations.

The program will make the job of office workers easier. They will be able to change the selected files quickly, without additional effort.

7.1 Environmental Impacts

Describes how the envisioned system could impact the environment of the local area, state, country, worldwide, space, and other planetary bodies as appropriate for the systems intended purpose. This includes the possibility of the generation of any orbital debris, potential contamination of other planetary bodies or atmosphere, and generation of hazardous wastes that will need disposal on earth and other factors. Impacts should cover the entire life cycle of the system from development through disposal.

7.2 Organizational Impacts

Describes how the envisioned system could impact existing or future organizational aspects. This would include the need for hiring specialists or operators, specialized or widespread training or retraining, and use of multiple organizations.

7.3 Scientific/Technical Impacts

This subsection describes the anticipated scientific or technical impact of a successful mission or deployment, what scientific questions will be answered, what knowledge gaps will be filled, and what services will be provided. If the purpose of this system is to improve operations or logistics instead of science, describe the anticipated impact of the system in those terms.

8.0 Risks and Potential Issues

The expected issues related to the program is the limitation of the size (in characters) which can cause problems while working with the large files. The program will stop the process of changing if the selected file will not fit in the limitations of the program.