**Project Name Design Document**

**Revision: 0.1**

**Date: 17-Mar-22**

**Authors**:

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision** | **Date** | **Summary of Changes** | **Author(s)** |
|  |  |  |  |

Table of Contents

[1 Introduction 4](#_Toc108424799)

[1.1 Definitions, Acronyms & Abbreviations 4](#_Toc108424800)

[1.2 Reference Materials 4](#_Toc108424801)

[1.3 Overview \ Background 5](#_Toc108424802)

[1.4 Requirements 6](#_Toc108424803)

[2 High Level Design 7](#_Toc108424804)

[2.1 Block Diagram 7](#_Toc108424805)

[2.2 High Level Flows 7](#_Toc108424806)

[2.3 Assumptions 7](#_Toc108424807)

[2.4 Limitations of the suggested design. 7](#_Toc108424808)

[3 Detailed Design 8](#_Toc108424809)

[3.1 Detailed Description of flows. 8](#_Toc108424810)

[3.2 Flowcharts (when needed). 8](#_Toc108424811)

[3.3 Data structures. 8](#_Toc108424812)

[3.4 Public API’s signatures. 8](#_Toc108424813)

[4 Testing 9](#_Toc108424814)

[5 Open Issues 10](#_Toc108424815)

# Introduction

## Definitions, Acronyms & Abbreviations

This section lists all the definitions, acronyms and abbreviations in this document.

|  |  |
| --- | --- |
| Abbreviation | Interpretation |
|  |  |

## Reference Materials

This section lists all the reference material relevant for this design.

|  |  |  |
| --- | --- | --- |
| Item | Name (Linked) | Revision |
|  |  |  |

## Overview \ Background

This chapter describe the high level description of the project and the problem it should solve.

The project's target is to compress and decompress file for saving storage in the computer.

The main goal is that the file will come back in its entirety after compression or decompression and to do it as quickly as possible.

The algorithms that the project implements will be combination of Lempel Ziv 77 and Hufman code.

## Requirements

This chapter lists in details the requirements that the design shall address

# High Level Design

This chapter describes the design of the project in high level, including:

## Block Diagram

visual representation of the system.

## High Level Flows

Description of main flows in high level

## Assumptions

Assumptions that the design considers

## Limitations of the suggested design.

Limitations of the suggested design

# Detailed Design

This chapter describes the design of the project in details, including:

## Detailed Description of flows.

## Flowcharts (when needed).

## Data structures.

## Public API’s signatures.

# Testing

This chapter describes how it’s planned to test this project.

# Open Issues