# “Hello World” Software Requirements Specification document:



## 1. Introduction

### 1.1 Purpose:

This document outlines the requirements for the software “Hello world” which aims to print the message “Hello world” with the option to display it in a graphical user interface (GUI) or a console and track the number of executions.

### 1.2 Product Scope

The scope of this project is limited to the development and implementation of the “Hello World" software. This includes:

-Designing the software architecture.
-Implementing the Java code to print the message from a text file containing the message to print .
-Ensuring compatibility with both Linux and Windows operating systems.
-Deliver jar file to the client.
-Provide a documentation on how to use the software for the client.
- Adding a graphical user interface to display the "Hello World" message.
-Tracking the number of times the software is executed within a single PC.

## 2. Overall Description

### 2.1 User Needs

Users of the "Hello World" software will be individuals printing a message “Hello world” in the console or a graphical user interface.

### 2.2 Assumptions and Dependencies

-The software depends either on the operating system's console or the graphical user interface for output.
-The user has either linux or windows as an operating system.
-The user do not have JDK (Java Development Kit) developed in the system.

## 3. System Features and Requirements

### 3.1 Functional Requirements

-Message Printing: the software prints the message "Hello World" with the number of execution the console or the graphical user interface.
-Graphical User Interface: The software shall provide a graphical user interface to display the message, allowing for easier interaction.
-Execution Count: The software shall track and display the number of times it has been executed within a single PC.

### 3.2 External Interface Requirements

-Input: The software will not require any input from the user.
-Output: The software will output the message "Hello World" with the number of execution the console or the graphical user interface.

### 3.3 System Features

-Java Implementation: The software will be implemented using the latest version of the Java programming (21.0.2)
-Console and GUI Modes: The software shall support both console and GUI modes of operation.
-Data Persistence: The software shall store the execution count persistently, possibly using a simple file or database.

### 3.4 Nonfunctional Requirements

-Performance: The software shall execute efficiently and with minimal resource usage, even when displaying the graphical user interface.
-Portability: The software shall be easily adaptable to different operating systems

(windows and linux).
-Reliability: The software shall function correctly under various conditions.
-usability: The software shall be easy to use and understand, even for users with limited programming experience.
-Maintainability: The software shall be well-structured and easy to modify or extend in the future.
-Security: The software shall not pose any security risks to the user's system.