
Diagrams Through ASCII Art (DITAA)
TEAM 2 IMPLEMENTATION PLAN

25 November 2020

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Introduction

1.1 Purpose

The purpose of this implementation document is to describe how our team will implement the suggested program called Diagrams Through ASCII Art (DITAA). This is a companion document to the team's existing Requirements, Specifications, and Design documents.

1.2 System Overview

The DITAA program will accept standard ASCII art, commonly found embedded within text documents, and convert the text-based art into a graphical representation. ASCII Art was commonly used to embed comments or logos in older programs. The goal of DITAA is to quickly extract the ASCII Art information and render a more human readable format to the user.

1.3 Assumptions and Constraints

The authors assume the intended users have a basic understanding of how to operate programs on a modern computer. The authors also assume the users know how to locate and navigate a modern Operating System.

1.4 Security and Privacy

The DITTA program should not introduce any security or privacy concerns. It is a standalone executable with no built-in connection to the internet.

2 Implementation Support

2.1 Hardware and Software

2.1.1 Hardware

The DITAA program will operate on any modern computer executing Linux or Windows. While not directly tested, the program should also operate on MacOS based systems, but no support is offered.

2.1.2 Software

The DITTA program will be written in Eclipse and compatible with Java version 8.

2.2 Documentation

A simple Readme and Help document will be included with the program.

2.3 Personnel

2.3.1 Staffing Requirements

The DITTA program will be developed by the two team members.

2.3.2 Training of Implementation Staff

The team members require no specific training, as they are both fully qualified Computer Scientists with years of experience and at least Bachelor level degrees.

2.4 Outstanding Issues

Currently, a testing matrix is not yet fully accepted for testing. This does not affect the team's ability to implement our proposed program.

2.5 Implementation Impact

When fully implemented, the DITAA program will enable basic and advanced user the ability to quickly parse ASCII Art embedded with text documents. Text documents is defined to be any file readable by a text parsing program. This will enable users to quickly read program's comments about the program. DITAA will also allow for extracting logos designed in ASCII Art embedded in the program for future use.

2.6 Performance Monitoring

DITAA is expected to use very little computing power or resources. DITAA's resource management will be monitored using the Operating System's built-in resource monitor.

2.7 Configuration Management Interface

Currently only the single version of DITAA will be released. The authors do not plan on providing updates or maintaining the repository after the initial release.

3 Implementation Verification and Validation

The DITT program will be implemented in Java version 8. The program will be tested on Linux using Ubuntu 16.04. Simple test ASCII Art will be used as input into the program to ensure program operation.

3.1 Acceptance Criteria

The acceptance Criteria for the DITAA program is known results from test cases. The authors will develop, by hand, expected results from the test cases. When the program is executed, the results will be compared to the truth set for accuracy. If the programmatic results are within an error tolerance of <5%, the DITAA program will have been deemed effective.

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Document Name	Description	Location
DITTA_Requirements	Requirements document	https://github.com/dimeandpenny/CS_7140_Group_Project/blob/master/CS_7140_Requirements_DH_KP_AS.pdf
DITTA_Specification	Specification document	https://github.com/dimeandpenny/CS_7140_Group_Project/blob/master/Team_2_DITAA_Specs.pdf
DITTA_Design	Design Document	https://github.com/dimeandpenny/CS_7140_Group_Project/blob/master/Team_2_DITAA_Design.pdf