System Version Description

for the

The Balance Project

DCN: SVD20231222-P1:128

Revision Date: 25 Sept, 2025

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Balance Project

DOCUMENT CHANGE HISTORY

The following table is a simple list of released revisions sent for review. Records of reviews and the review artifacts are saved with reviewer information in the The Balance Projectartifact repository.

Change Record

Date	Version	Author(s)	Change Reference
13 Sep 2025	P1	Vinay Agarwal	Preliminary DRAFT version

Draft P1 Preliminary version of this document.

1. Baseline Document draft 1

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Scope

This document provides the System Version Description (**SVD**) for the The Balance System. The system will be referred to as the The Balance System.

This document is generally cited as [**ref¨KNEAD¨SVD¨ExProj**].

1.1 Identification

The The Balance System described in this document shall be known as The Balance System version 1.

1.2 System Overview

The The Balance System is a game that users an play a game.

Figure 1 shows the high-level architecture for the The Balance System system. This
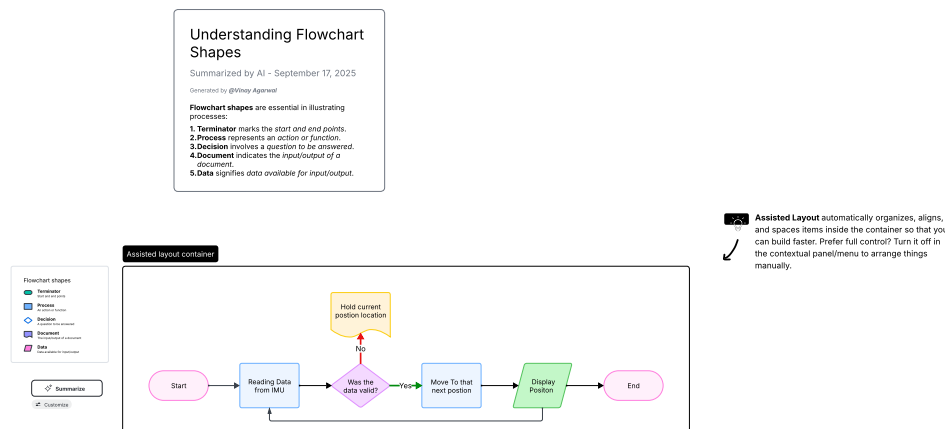

Figure 1: System Overview

diagram shows the major external interfaces that provide the capabilities of The Balance System. As are shown, the The Balance System can provide **...TBD...**.

This system would be a game where the user would have to balance a ball on a LCD screen that is builtin on the STM32 board. We shall read data from an MEM every single

frame. The Balance System would keep track of the current position of the ball and where the next updated move is. This helps keep track of the system of where the ball is until a movment occure. The Balance System shall process at a maximum 180 Hz. This would give the user enough time to process the current angle of the ball and be able to present on the LCD-TFT screen.

1.3 Document Overview

There is no security issue with this device currently. There has not been any testing with the system on a cyber level, currently this system is not harden.

CHAPTER 2

References

This section provides a list of referenced items for this document.

2.1 Acronyms and Abbreviations

This section defines acronyms and abbreviations used in this and related documents.

Table 1: Acronym Definitions

Acronym	Definition
ATV	Analog Television
AV	Audio / Visual
End of acronym definition table	

2.2 Glossary and Definitions

This section defines glossary terms used in this and related documents.

Table 2: Glossary Terms and Definitions

Glossary Term	Definition
Communications	Communication is information transfer, among users or processes, according to agreed conventions.
Customer	The local government project lead who is acting as a general manager for the sponsor to ensure that the contractor team executes the project according to stakeholder goals.
End of glossary terms table	

2.3 Referenced Documents

This section lists the referenced documents for this document. The references are categorized into two categories:

External Documents not directly associated with this project.

Project Documents that are directly associated with this project.

2.3.1 External Documents

2.3.2 Project Specific Documents

CHAPTER 3

Version Description

This chapter provides an output of how version control works.

3.1 Inventory of Materials

ID	Titles	Abrv	Dates	Version	Release	Description
ID1	Buying hardware	BS	09/17/2015	V1.0.0	0	Just purchased the STM32 board

3.2 Inventory of Software

Software Name	Description
Mbed Studio	Deployed code to the STM32 board
Visual Studio Code	Writing the codebase in this editor
Github	Includes Version Source Control and Pipline Jobs

3.3 Changes From Prior Version

ID	Titles	Abrv	Dates	Version	Release	Description
ID1	Basic setup	BS	09/17/2015	V1.0.0	0	Initial design

3.4 Adaptation Data

The version sets up an system will have a bare minimum approach. Just to have basic functionality.

3.5 Related (Third Party) Documents

Currently there are no third party artifacts that we need for this project.

ID	Titles	Abrv	Dates	Version	Release	Description

3.6 Installation Instructions

- First connect board to laptop directly through micro-usb.

- Using the embed studio IDE (this might change to use Keli Studio) identify which chip by connecting to it.

- Once the code is up and running then deploy to it.

3.7 Possible Problems and Known Errors

The system is not completely working. There would be problems when running the system.

APPENDIX

Appendix

This section is **...TBD...**.

A.1 Appendix Area 1

This section is **...TBD...**.

A.2 Appendix Area 2

This section is **...TBD...**.

Index