

Software Requirements Specification for Chess Connect: Online tools combined with on-board vision to improve and share your game

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Table 1: Revision History

Date	Developer(s)	Change
2022-10-04 date	Jonathan Cels name	Template creation and document formatting change

1 Units, Terms, Acronyms, and Abbreviations

1.1 Table of Units

Throughout this document SI (Système International d'Unités) is employed as the unit system. In addition to the basic units, several derived units are used as described below. For each unit, the symbol is given followed by a description of the unit and the SI name.

symbol	unit	SI
V	electric potential	volt
A	current	ampere
Ω	resistance	ohm
s	time	second
$^{\circ}\text{C}$	temperature	centigrade
J	energy	joule
W	power	watt ($\text{W} = \text{J s}^{-1}$)

1.2 Abbreviations and Acronyms

symbol	description
A	Assumption
DD	Data Definition
GD	General Definition
GS	Goal Statement
IM	Instance Model
LC	Likely Change
LCD	Liquid Crystal Display
LED	Light-Emmitting Diode
MCU	Micro Controller Unit
PS	Physical System Description
R	Requirement
SRS	Software Requirements Specification
T	Theoretical Model

1.3 Mathematical Notation

1.4 Terminology and Definitions

2 Introduction

2.1 Document Purpose

2.2 Characteristics of Intended Reader

2.3 Characteristics of Intended User

2.4 Stakeholders

3 Problem Description

4 Assumptions

The purpose of the project is to facilitate the design and development of a chess board with the capability of transmitting moves to an online ap-

plication. This would require solving object detection and accurate data transfer while implementing procedures to perform deep learning, motion tracking, embedded systems, computer-aided design, and successful integration between hardware and software. The objective of Chess Connect is to accomplish the goal of integrating over-the-board chess with the online world of chess to assist in learning the game of chess in a flexible manner.

5 Constraints

6 Scope

7 Project Overview

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9 Requirements

9.1 Functional Requirements

9.2 Nonfunctional Requirements

10 Likely Changes

11 Unlikely Changes

12 Traceability Matrix

A Values of Auxiliary Constants

A Reflection

A.1 Skills for Success

A.2 Knowledge and Learning Approaches