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

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Table of Revisions

Table 1: Revision History

Date	**Developer(s)**	**Change**
2022-10-04	Jonathan Cels	Template creation and document formatting
date	name	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
°C	temperature	centigrade
J	energy	joule
W	power	watt ($\mathrm{W} = \mathrm{J\,s^{-1}}$)

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

NFR1 : **Accuracy** The software application game state will model the game state on the Chess Connect hardware with a high degree of accuracy. The level of accuracy shall be described following the procedure given in Section 5.2.1 of the VnV (Verification and Validation) Plan.

NFR2 : **Usability** The product will be able to be used by chess players of any experience level with minimal instruction. The level of usability achieved by the system shall be described following the procedure given in Section 5.2.2 of the VnV Plan.

NFR3 : **Style** The product shall look and feel similar enough to traditional chess boards and chess pieces that the target audience will recognize the product as a chess set when encountering it for the first time. The level and speed of audience recognition achieved by the design shall be described following the procedure given in Section 5.2.3 of the VnV Plan.

NFR4 : **Maintainability** The effort required to make any of the likely changes listed for Chess Connect should be less than FRACTION of the original development time.

NFR5 : **Portability** Chess Connect shall be accessible from any web browser. The application shall be able to be hosted on at least any of the following systems:

1. Windows 8
2. Windows 10
3. Windows 11
4. WSL 2 (Windows Subsystem for Linux)
5. Ubuntu

NFR6 : **Reusability**

- Other NFRs that might be discussed include verifiability, understandability and reusability.

A Reflection

A.1 Skills for Success

A.2 Knowledge and Learning Approaches