System Verification and Validation Report for Chess Connect

Team #4,
Alexander Van Kralingen
Arshdeep Aujla
Jonathan Cels
Joshua Chapman
Rupinder Nagra

 $March\ 6,\ 2023$

1 Revision History

Date	Version	Notes
2021-03-04	Arshdeep Aujla	Added Template for Nonfunctional Requirements
2021-03-05	Arshdeep Aujla	Added Table for functional requirements, traceability matrix

2 Symbols, Abbreviations and Acronyms

symbol	description
Т	Test

Refer to SRS Section 1 for an extensive list of used symbols, abbreviations, and acronyms.

Contents

1	Revision History	i
2	Symbols, Abbreviations and Acronyms	ii
3	Functional Requirements Evaluation 3.1 Game Active State	1 1 2 2 3
4	Nonfunctional Requirements Evaluation 4.1 Look and Feel	3 3 3 4 4 4 4 4 4
5	Unit Testing	5
6	Changes Due to Testing	5
7	Automated Testing	5
8	Trace to Requirements	5
9	Trace to Modules	6
10	Code Coverage Metrics	6
A	Reflection Appendix	6
\mathbf{L}	ist of Tables	
	Active State Functional Requirements Results	1 1 2 2 3

6	Look and Feel Non-Functional Requirements Results	٠
7	Usability and Humanity Non-Functional Requirements Results	3
8	Performance Non-Functional Requirements Results	4
9	Health and Safety Non-Functional Requirements Results	4
10	Precision and Accuracy Non-Functional Requirements Results	4
11	Capacity Non-Functional Requirements Results	4
12	Security Non-Functional Requirements Results	4
13	Requirements Traceability Matrix	6

List of Figures

This document ...

3 Functional Requirements Evaluation

Refer to the VnV Plan for descriptions of the tests derived to evaluate the functional requirements.

3.1 Game Active State

Test	Result	Notes
GA-1		
GA-2		
GA-3		
GA-4		
GA-5		

Table 1: Active State Functional Requirements Results

3.2 Game Inactive State

Test	Result	Notes
GI-1		
GI-2		
GI-3		
GI-4		
GI-5		

Table 2: Inactive State Functional Requirements Results

3.3 Normal Mode

Test	Result	Notes
NB-1		
NB-2		
NB-3		
ND-1		
NA-1		
NA-2		

Table 3: Normal Mode Functional Requirements Results

3.4 Engine Mode

Test	Result	Notes
EB-1		
EB-2		
EB-3		
EB-1		
ED-1		
ED-2		
EA-1		
EA-2		
EA-3		

Table 4: Engine Mode Functional Requirements Results

3.5 Beginner Mode

Test	Result	Notes
BB-1		
BB-2		
BB-3		
BB-4		
BB-5		
BD-1		
BA-1		
BA-2		

Table 5: Beginner Mode Functional Requirements Results

4 Nonfunctional Requirements Evaluation

Refer to the VnV Plan for descriptions of the tests derived to evaluate the non-functional requirements.

4.1 Look and Feel

Test	Result	Notes
NFT-1		

Table 6: Look and Feel Non-Functional Requirements Results

4.2 Usability and Humanity

Test	Result	Notes
NFT-2		
NFT-3		

Table 7: Usability and Humanity Non-Functional Requirements Results

4.3 Performance

Test	Result	Notes
NFT-4		
NFT-5		
NFT-6		
NFT-7		

Table 8: Performance Non-Functional Requirements Results

4.4 Health and Safety

Test	Result	Notes
NFT-8		

Table 9: Health and Safety Non-Functional Requirements Results

4.5 Precision and Accuracy

Test	Result	Notes
NFT-9		

Table 10: Precision and Accuracy Non-Functional Requirements Results

4.6 Capacity

Test	Result	Notes
NFT-10		

Table 11: Capacity Non-Functional Requirements Results

4.7 Security

Test	Result	Notes
NFT-11		
NFT-12		

Table 12: Security Non-Functional Requirements Results

- 5 Unit Testing
- 6 Changes Due to Testing
- 7 Automated Testing
- 8 Trace to Requirements

Test	Requirement	
GA-1	GA1	
GA-2	GA2	
GA-3	GA3	
GA-4	GA6	
GA-5	GA7	
GI-1	GI1	
GI-2	GI2	
GI-3	GI3	
GI-4	GI4	
GI-5	GI5, GI6	
NB-1	NB1	
NB-2	NB2	
NB-3	NB3	
ND-1	ND1	
NA-1	NA1, NA2	
NA-2	NA3	
EB-1	EB1	
EB-2	EB2	
EB-3	EB3	
EB-4	EB4	
ED-1	ED1	
ED-2	ED2	
EA-1	EA1, EA2	
EA-2	EA3, EA4, EA5	
EA-3	EA6	

BB-1	BB1
BB-2	BB2
BB-3	BB3
BB-4	BB4
BB-5	BB5
BD-1	BD1
BA-1	BA1
BA-2	BA2
NFT1	LF3
NFT2	UH5
NFT3	UH6
NFT4	PR1
NFT5	PR2
NFT6	PR3
NFT7	PR4
NFT8	PR6
NFT9	PR7
NFT10	PR10
NFT11	SR4
NFT12	SR3

Table 13: Requirements Traceability Matrix

9 Trace to Modules

10 Code Coverage Metrics

A Reflection Appendix

References