

# Chess Editor

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# **1 Project Definition**

## **1.1 Purpose**

## 2 Project Requirements

### 2.1 Functional Requirements

#### 2.1.1 Primary Requirements

The primary requirements of the project must be functional at 'all times'. These requirements include the following:

1. User can play a game of chess:
  - Locally (vs Player)
  - vs Computer
2. User can create, load, and play chess scenarios and variants like:
  - Chess960
  - 3-Check
  - King of The Hill [1]
  - Horde
3. The user is able to add a chess engine<sup>1</sup>.

#### 2.1.2 Secondary Requirements

The secondary requirements of the project may not always be function and are dependent on specific situation. These requirements include the following:

1. User can play a game of chess remotely.
2. User can use program to analyze moves.

### 2.2 Usability

#### 2.2.1 User Interface

The user interface must not be obtrusive and intuitive. Visuals need to be properly contrasted for differentiation.

#### 2.2.2 Performance

The program must be able to perform without noticable performance drop in all situations with the exception of analysis and secondary features.

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<sup>1</sup>Whether the chess engine works is dependent on the engine. However at least two public chess engines must work with the application.

## **2.3 System**

### **2.3.1 Hardware**

The required hardware is a standard personal computer with a monitor display.

### **2.3.2 Software**

**Required Software** The required software includes:

- Graphviz: Reason

**Operating System** This program must be able to on both Windows 10 and Linux (specifically OpenSuse 15.2).

### **2.3.3 Database**

(POSTPONED)

### **2.3.4 Networking**

Certain secondary functionality requires a network connection in order to work properly.

## **2.4 Security**

There are currently no security requirements with the exception of optional password protection for saved games and hosted games.

### **3 Project Specification**

#### **3.1 Scope**

#### **3.2 Libraries/ Frameworks/ Development Environments/ Dependencies**

#### **3.3 Platform**

#### **3.4 Genre**

### **4 System - Design Perspective**

#### **4.1 Subsystems**

##### **4.1.1 Models**

### **5 System - Analysis Perspective**

#### **5.1 Subsystems**

### **6 Project Scrum Report**

#### **6.1 Product Backlog**

#### **6.2 Sprint Backlog**

#### **6.3 Burndown Chart**

### **7 Subsystems**

#### **7.1 Subsystem 1**

##### **7.1.1 Initial Design and Models**

##### **7.1.2 Data dictionary**

##### **7.1.3 Revisions**

##### **7.1.4 Scrum Backlog**

##### **7.1.5 Coding**

#### **Approach**

#### **Language**

#### **7.1.6 User Training**

#### **7.1.7 Testing**

### **8 Complete System**

### **9 References**

#### **References**

- [1] Chess.com, “Chess variants - the 6 most important ones.”