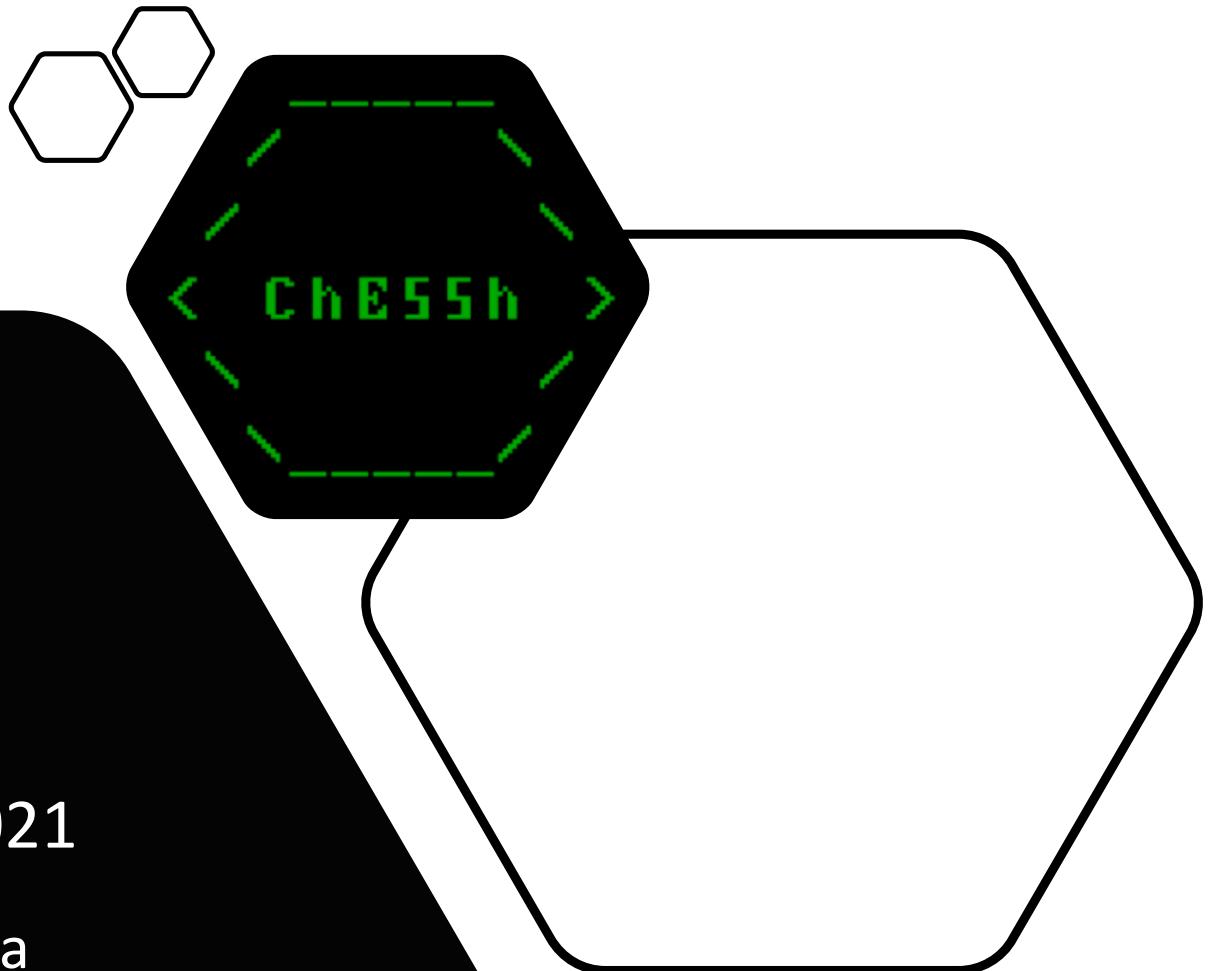


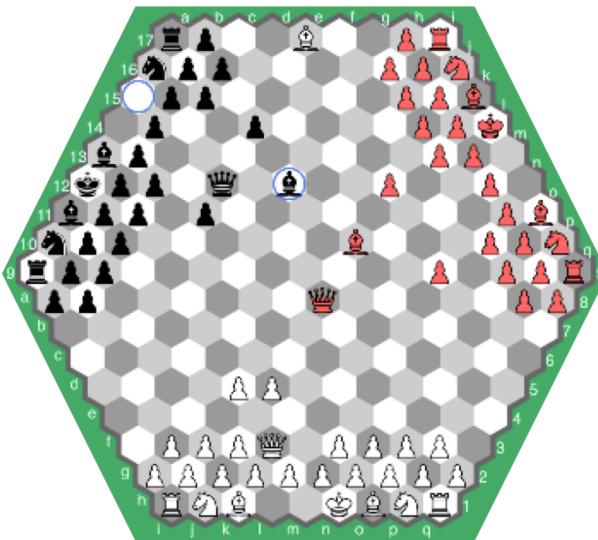
ChE55h

Meilenstein 3
Programmierprojekt 2021

Edi, Jonas, Raffael, Sascha



Spielbrett



Spielfiguren



Bauer

Turm

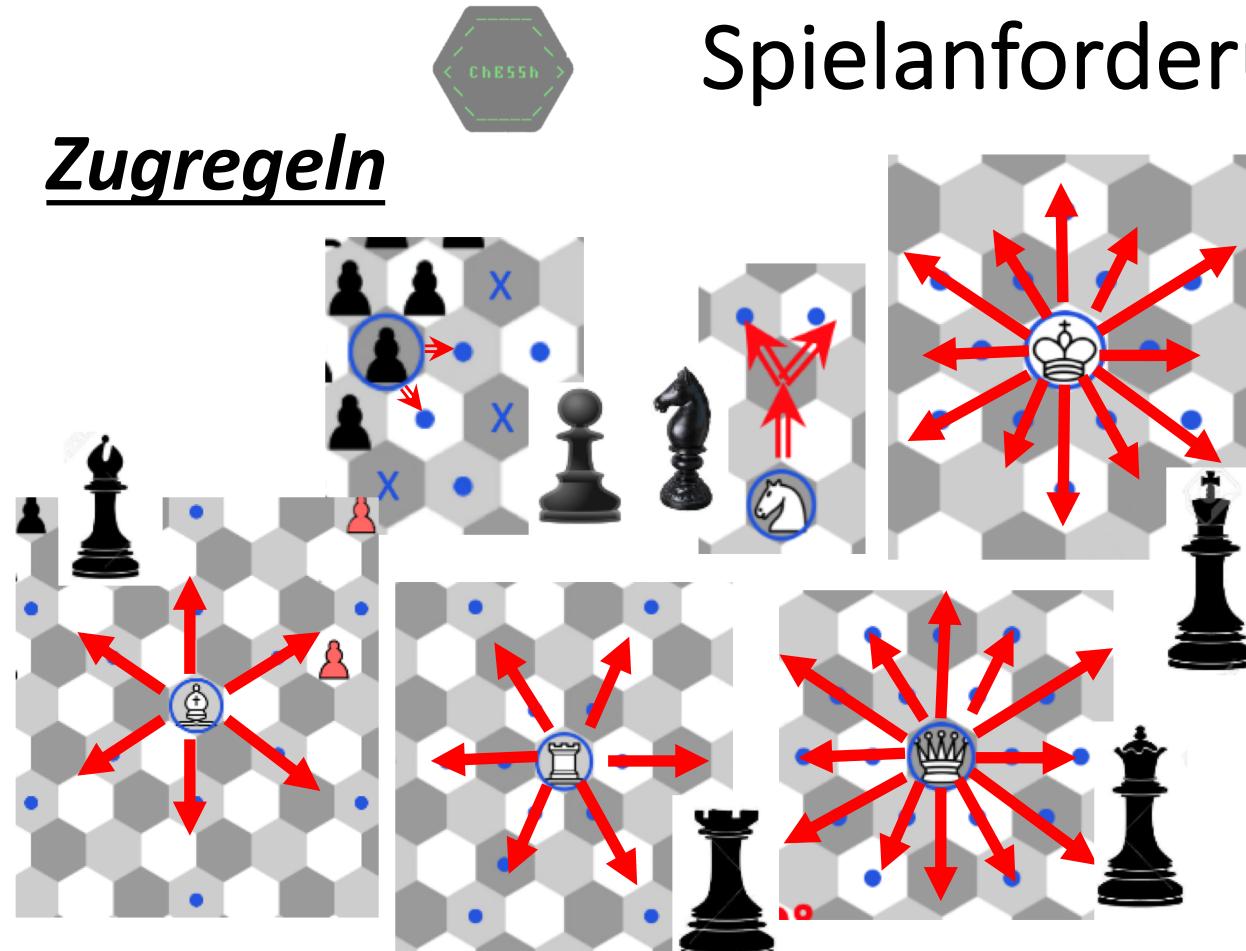
Läufer

Königin

Springer

König

Zugregeln



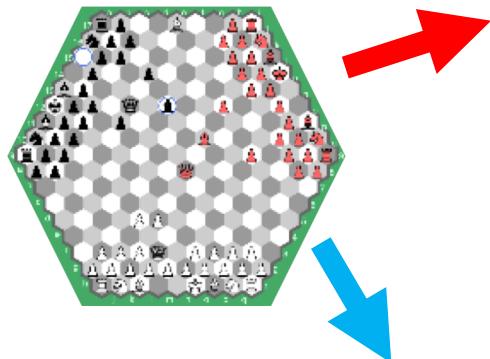
Spielanforderungen

Ziel

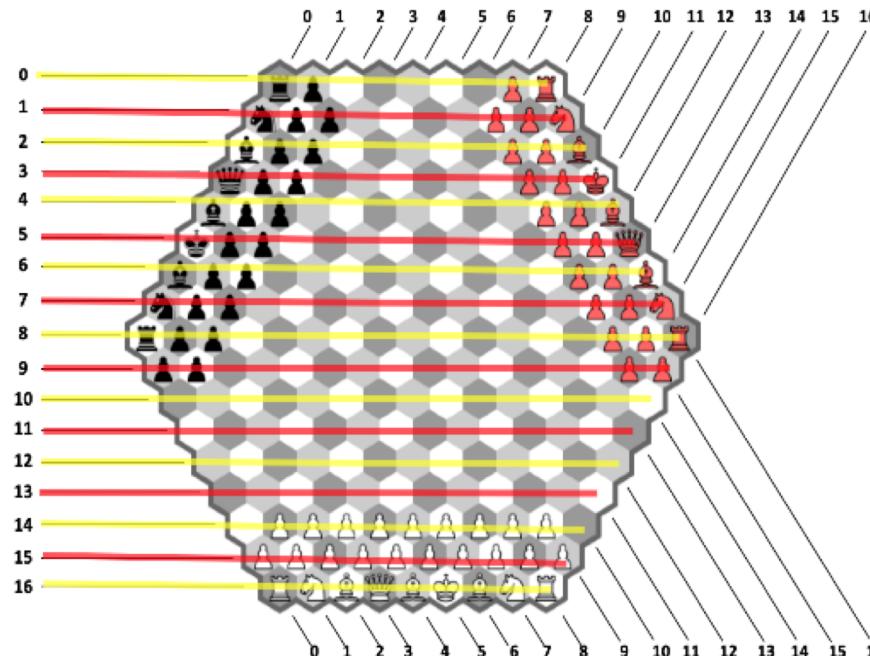
König Schachmatt setzen

Umsetzung im Programm

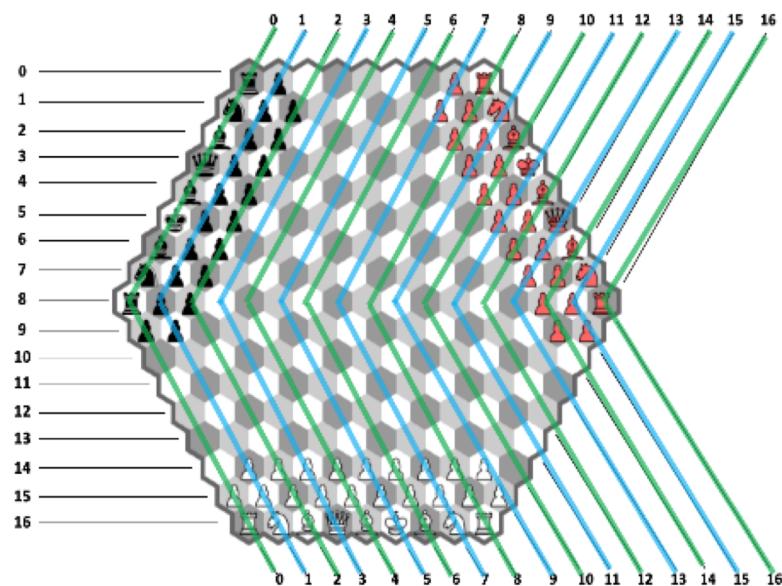
Spielfeld



Zeilenummerierung



Spaltennummerierung



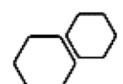
Speicherung Spielfeld

2

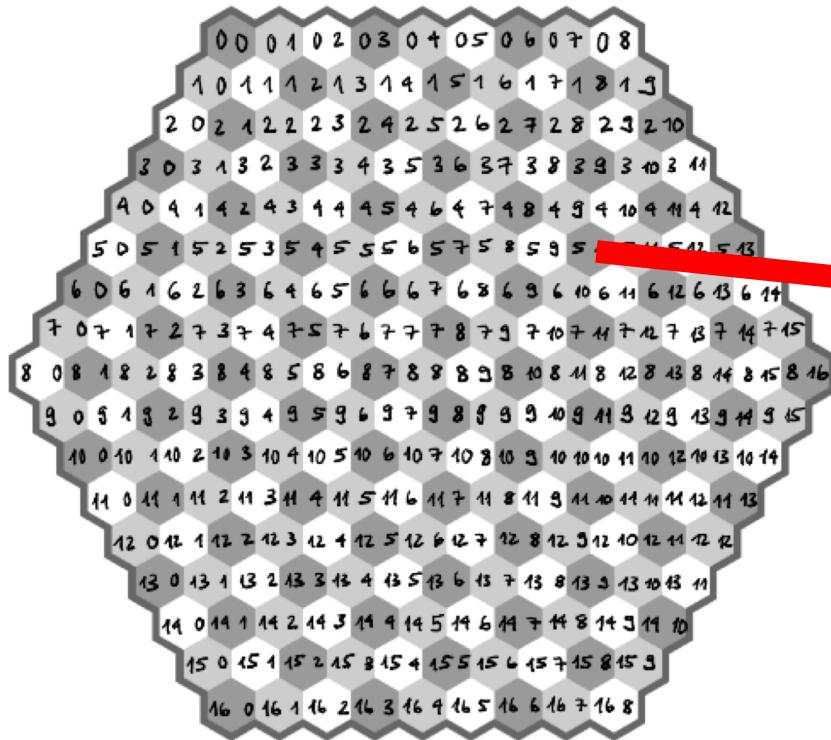
Spielfeld als 2 dim. Array

- 1. Dim.: Zeilen
- 2. Dim.: Spalten

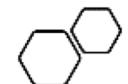
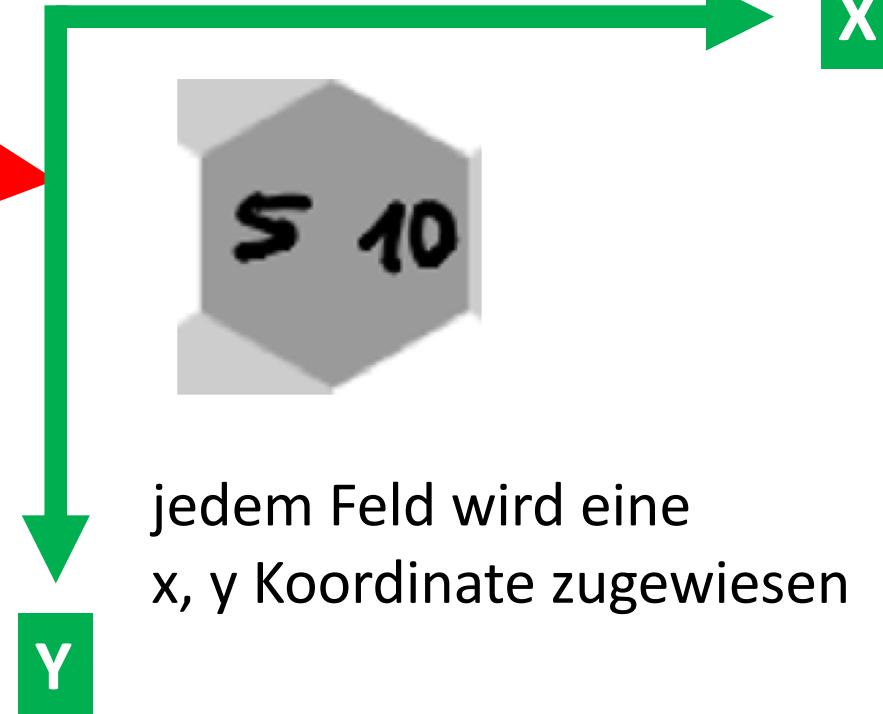
Zeilen haben unterschiedliche Feldanzahl



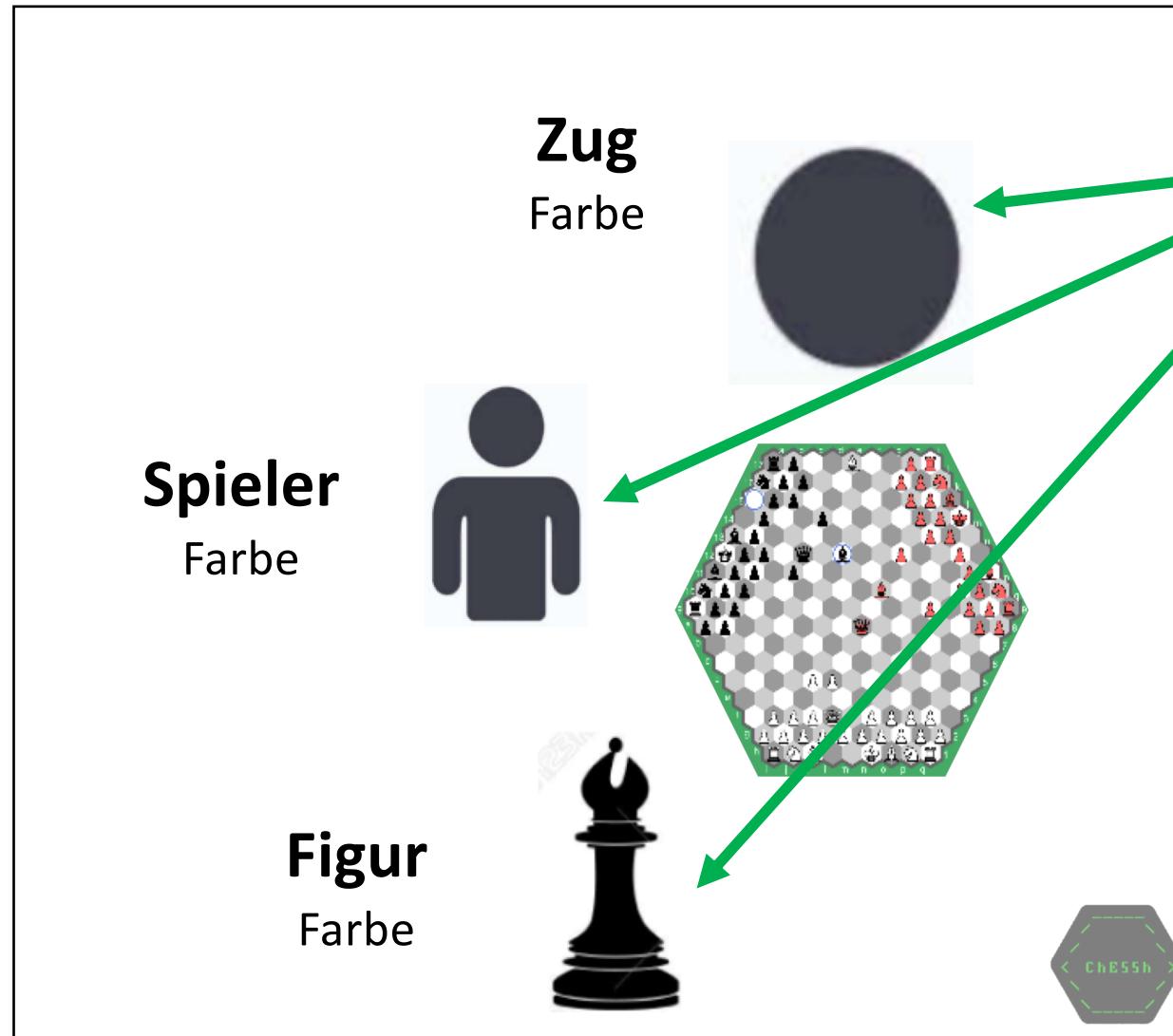
Spielfeld



Koordinatenzuweisung

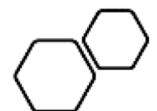


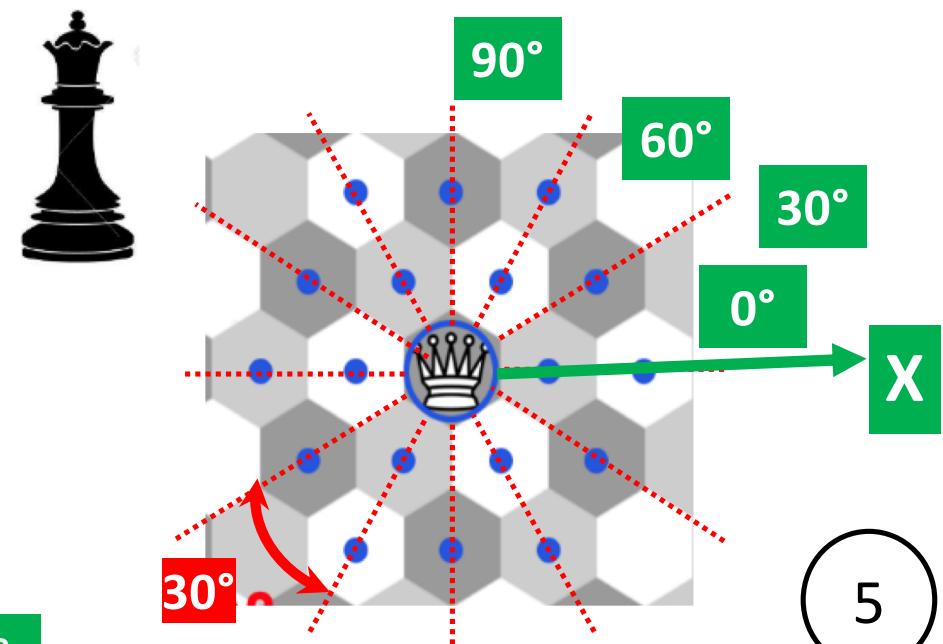
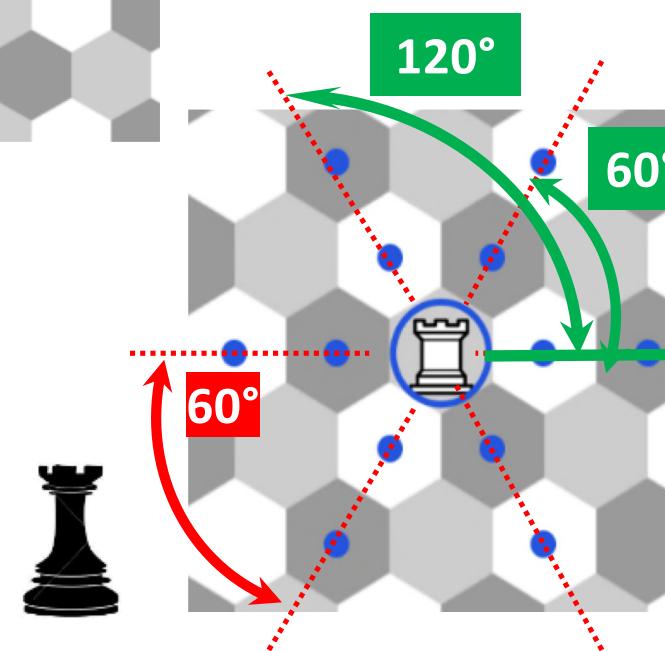
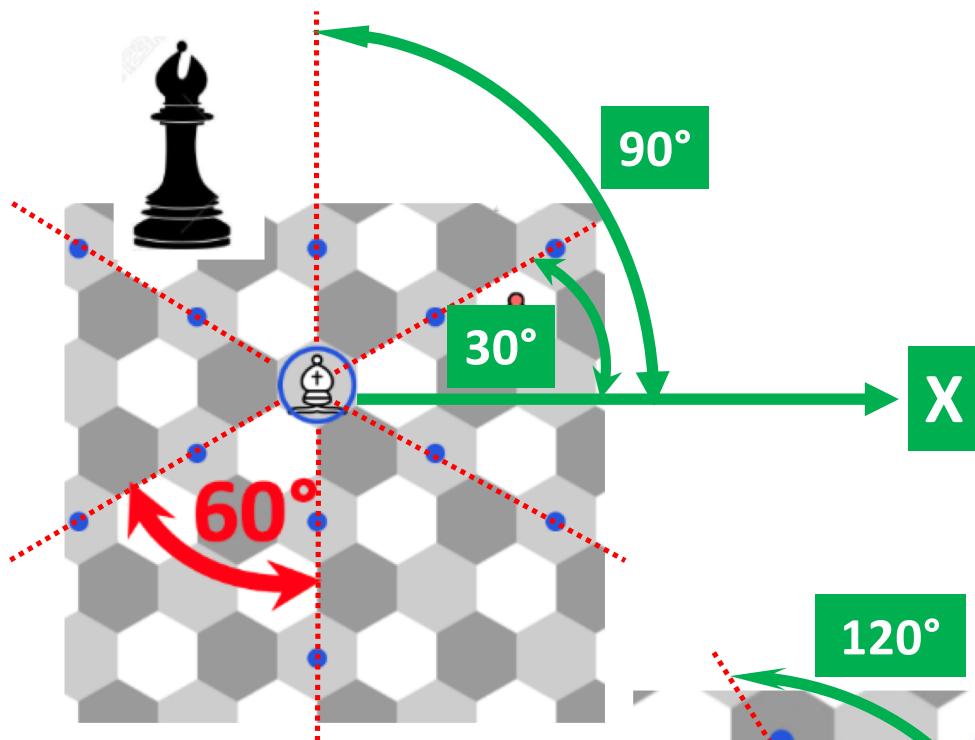
Zug



Zug möglich

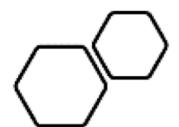
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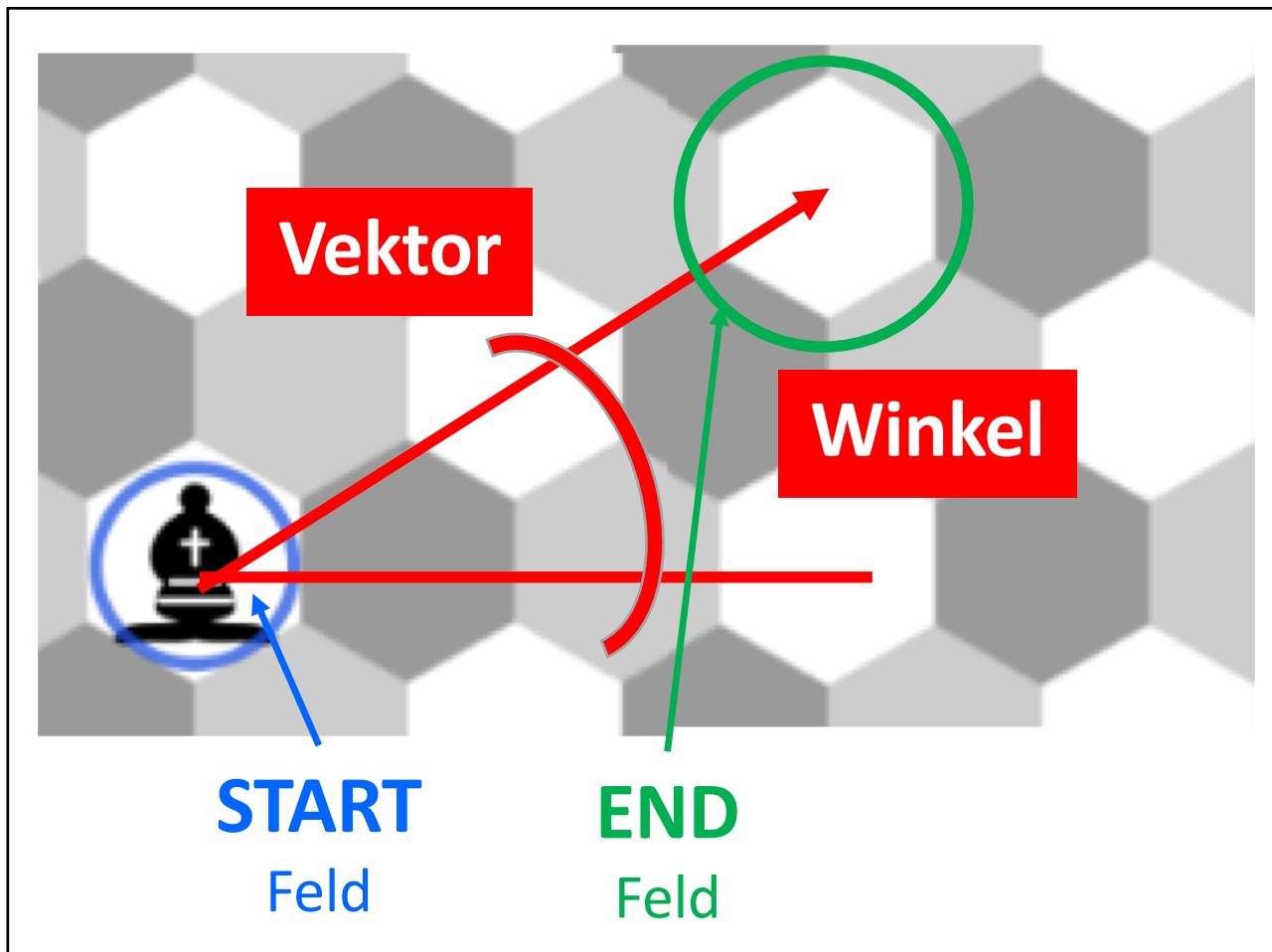


Winkel-Vorgabe pro Figur

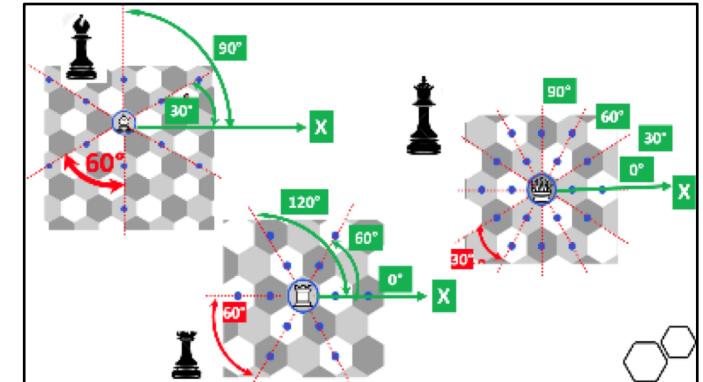
„Zug“-Winkel



5



Vektor / Winkel



Winkel-Vorgabe pro Figur

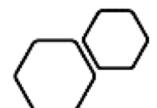
„Zug“-Winkel

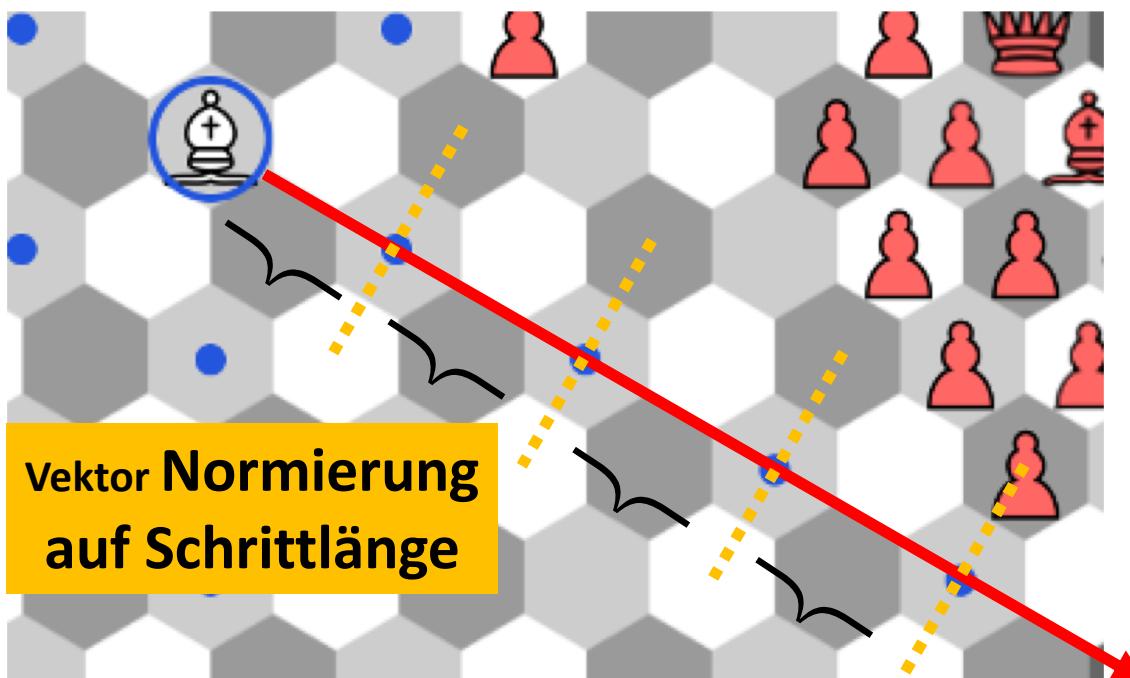
6

Übereinstimmung

Zug Eingabe

Zug möglich



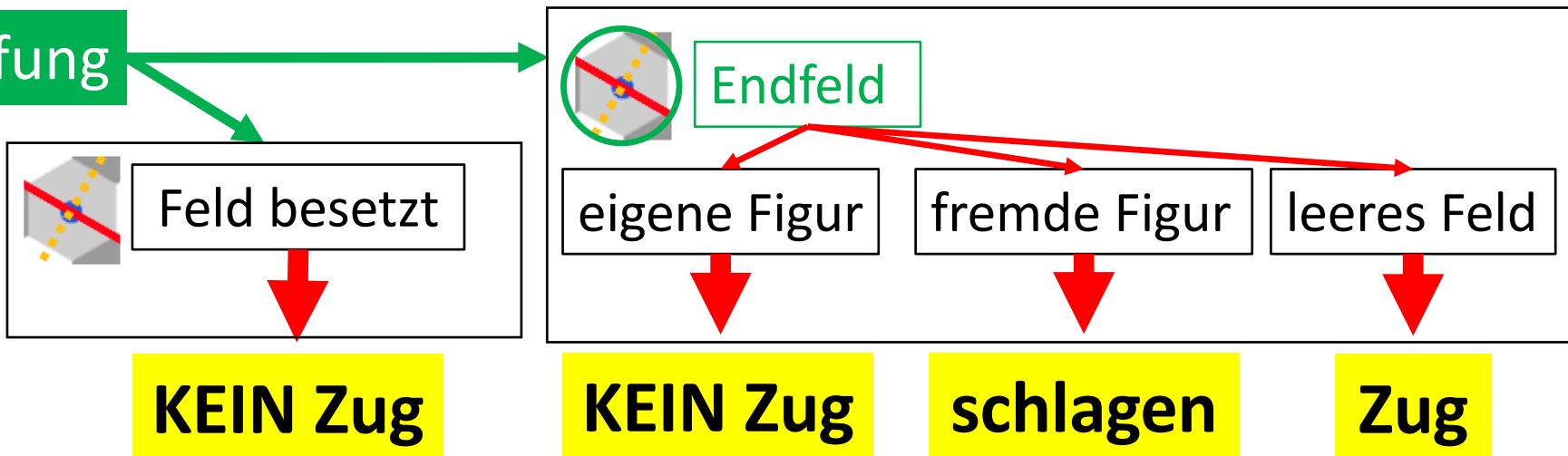


Zug

Geradengleichung
in Parameterform mit
normiertem
Richtungsvektor

7

Überprüfung



Quality Assurance

Was wird gemessen?

- Code Coverage
- Metrics:
 - Anz. Zeilen Code pro Methode
 - Anz. Methodenaufrufe
 - Qualität der Kommentare von Methoden

Wie wird gemessen?

- Jacoco
- Metrics:
 - Metrics Reloaded
 - Javadoc

8



Constructor	Description
Net()	

Method Summary

All Methods	Static Methods	Concrete Methods
Modifier and Type	Method	Description
static void	broadcast(java.lang.String name, java.lang.String msg)	needed for achievement
static void	chooseLobby(int i, java.lang.String name)	adds player to the chosen Lobby if possible
static void	command(char[] packet)	
static void	createLobbies()	creates empty lobbies
static void	error(char[] packet)	Sends Error
static void	getList(java.lang.String name, java.lang.String msg)	prints list of lobbies, usernames or game status to this specific user
static void	lobbyBroadcast(java.lang.String msg, Lobby lobby)	sends message to all lobby players (max 3)
static void	refresh(char[] packet)	
static void	rename(java.lang.String name, java.lang.String input)	changes username if entered username is unique
static void	sendBel(char[] packet, java.lang.String name)	
static void	sendMsg(java.lang.String name, java.lang.String msg)	send message to all Clients
static void	sendMsgBack(java.lang.String name, java.lang.String msg)	sends message back to this user, as in feedback
static int	validate(char[] packet)	



- Weitere Tools:

- Log4j2 (Logger: Debug und Output-Speicher)
- JUnit-Tests

9

Anforderung	Merkmal	Untermerkmal	Mass/ Tests
Mehrere Spieler	Lobbies	Beitrittsfunktion	Eingabe: \$Lobbynummer
		3 Spieler pro Lobby	Bei 4tem Spielbeitritt einer Lobby erscheint Meldung: Lobby already full
		Austrittsfunktion	
		max. 3 Spieler in einer Lobby	Bei 4tem Spielbeitritt einer Lobby erscheint Meldung: Lobby already full





Progress Report

Bisher:

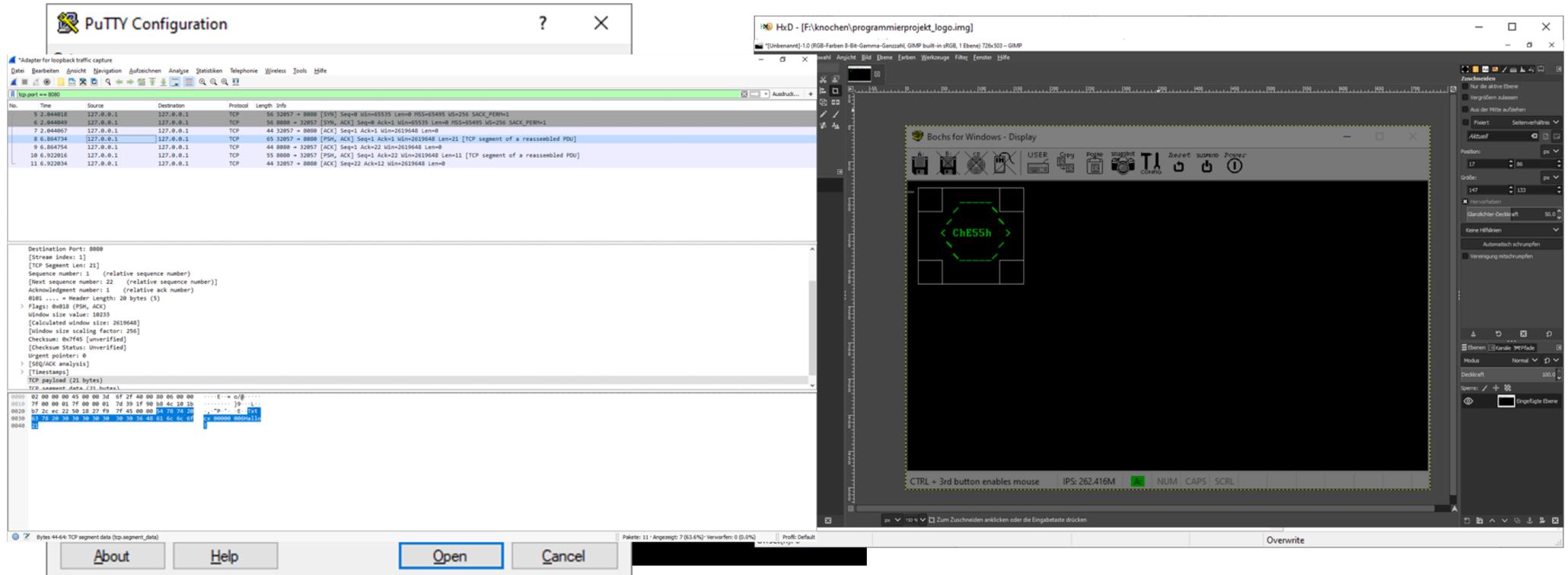
- Im Zeitplan gut dabei
- Probleme mit Gradlew und IntelliJ

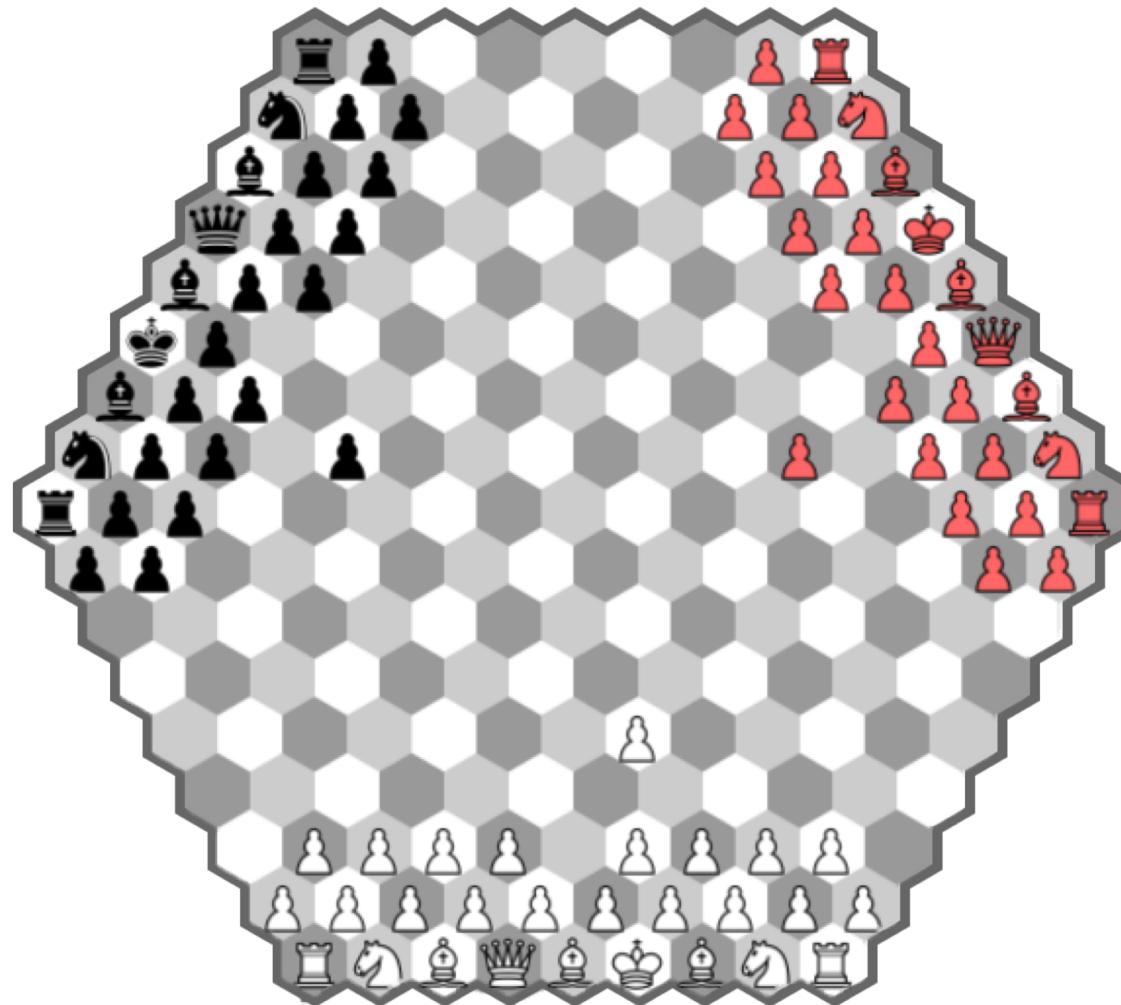
Für die nächsten Meilensteine:

- Fokus auf GUI in der nächsten Woche
- Lobby (Edi)
- Schachbrett (Jonas)
- Start Menu (Sascha)
- Bugfixes (Raffael)

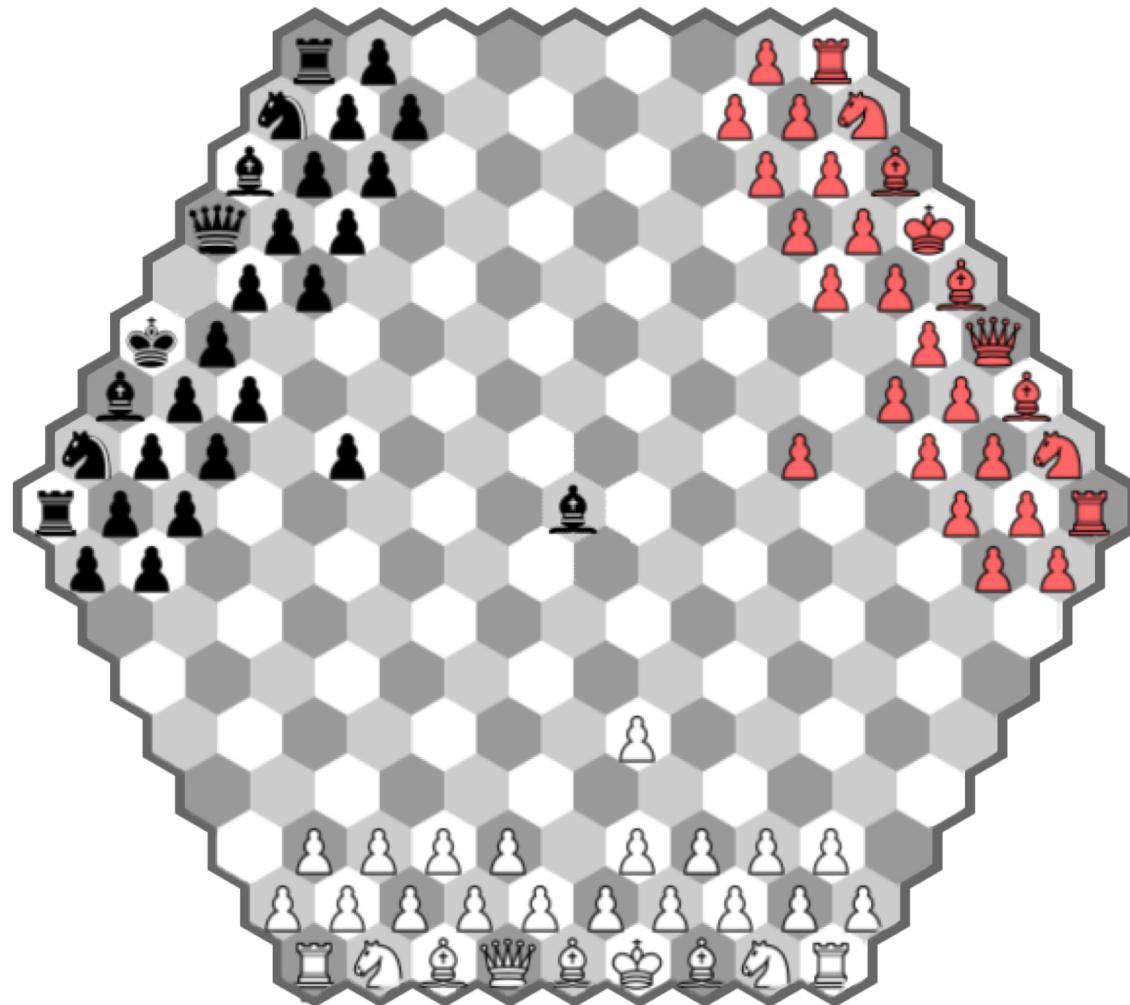
10

TECHNOLOGY

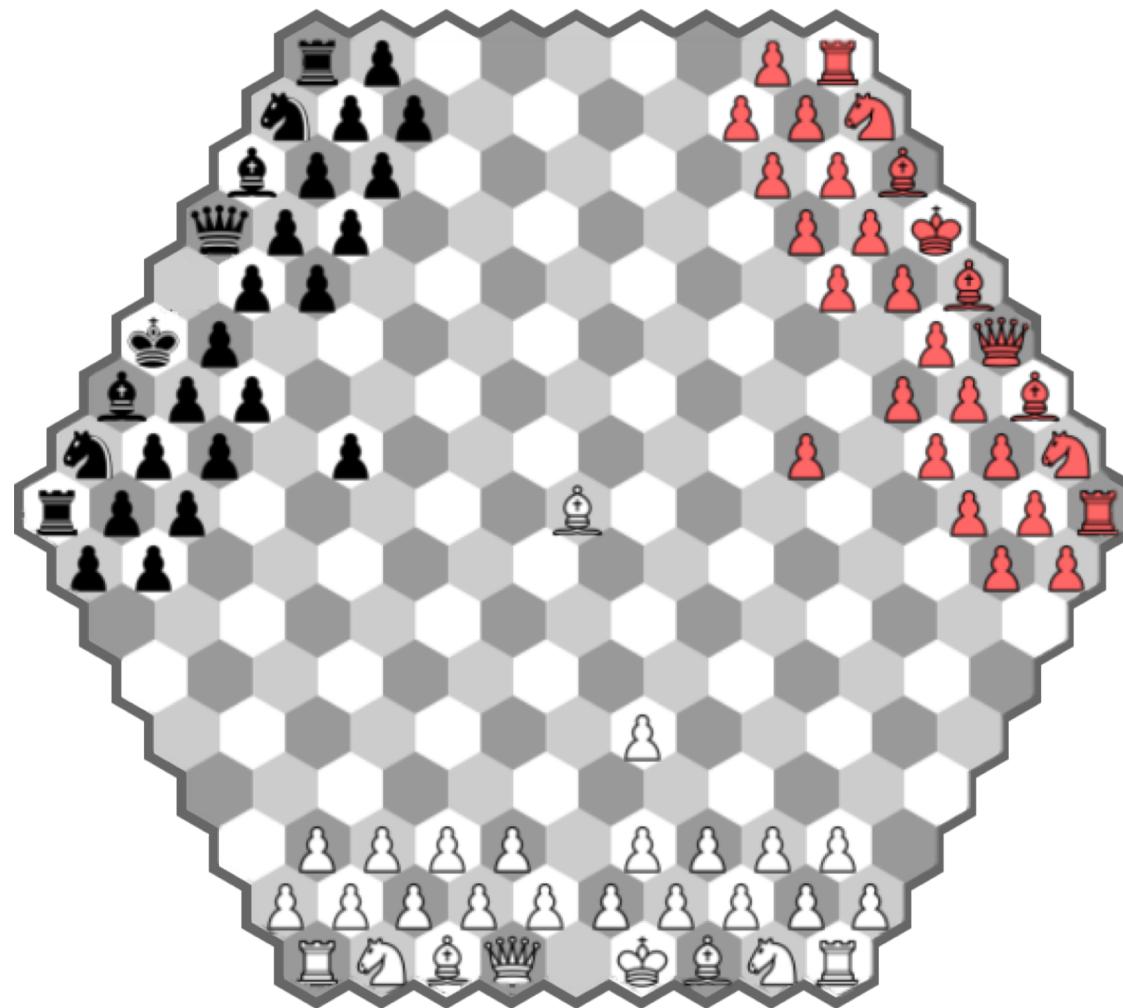




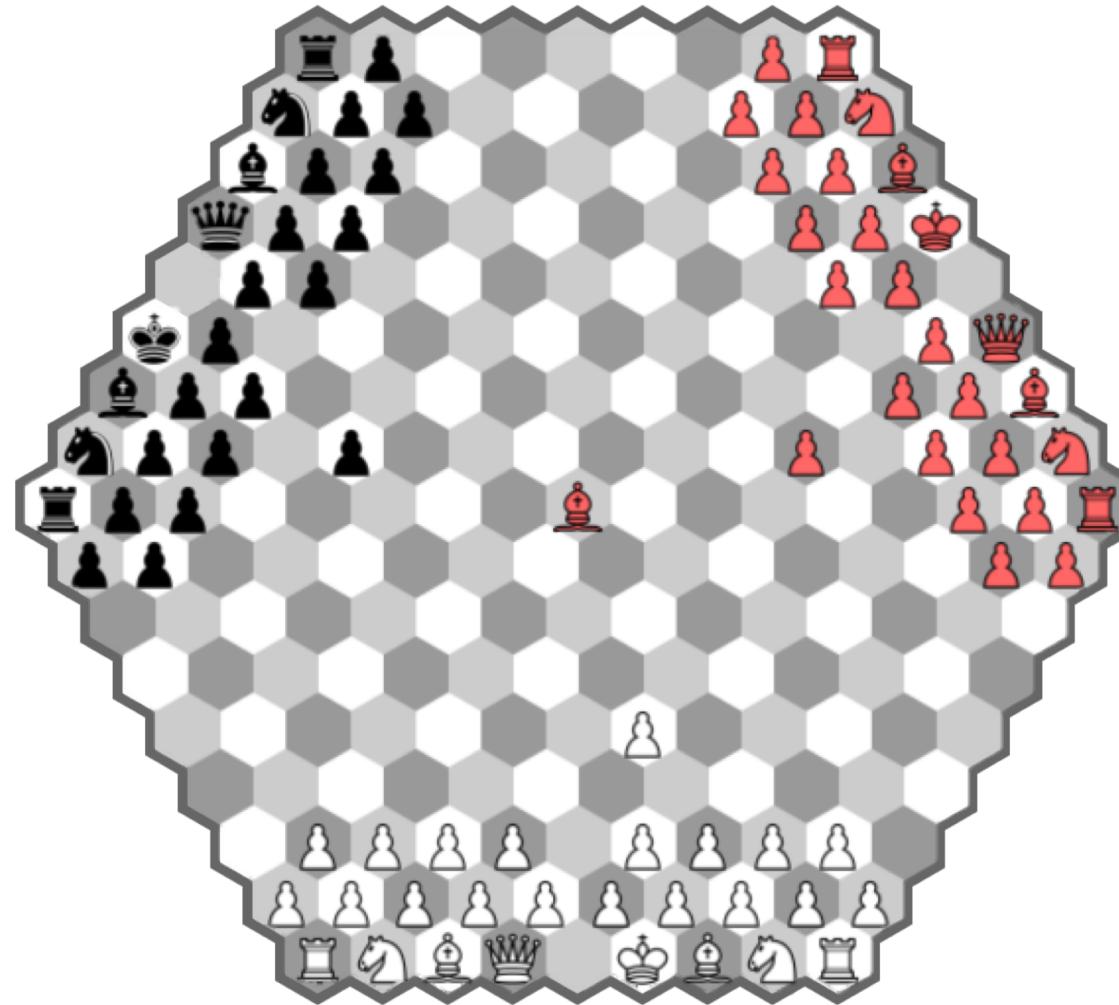
12



13



14



15

???

