UML Class Diagram

House
- name: String
- color: enum
- figures List<Figure>
- atomicsLeft: byte
- allowedToRetribute: boolean

+ getFigures(): List<Figures>
+ enableRetribution()
+ createFigure(type enum)

Player
- id: byte
- name: String
- spiceBalance: int
- house: House

Szenario
- fieldTiles: Field[][]
- figures: List<Figures>
- sandworm: Sandworm
- sandstorm: Coordinates
- cityp1: Field
-cityp2: Field

+ sandstormPhase()
+ sandwormPhase()
+ getFieldTiles(): Field[][]
+ getFigures(): List<Figures>
+ getNeighbors(): List<Field>
+ spiceBlow(coordinates: Coordinates)
+ getSpiceAmount(): int
+getField(coordinates: Coordinates)
+getPath(start: Coordinates, end: Coordinates): Path
+clonePhase()

Match
- roundCount: byte
- szenario: Szenario
- player1: Player
- player2: Player
- overtimeCounter: byte
- overtime: boolean
- currentPhase: enum
- activePlayer

+ changePhase()
+ changeActivePlayer()

StartScreen

Gamescreen

OptionScreen

EndScreen

Config
Siehe Standardisierungsdokument

+ create Mentat(): Mentat
+ createFighter(): Fighter
+ createBeneGesserit(): BeneGesse
+ createNoble(): Noble
+ initializeSzenario()
+ initialize()

Figure
- movePoints: ubyte
- healthPoints: ubyte
- actionPoints: ubyte
- healingPoints: ubyte
- maxHealthPoints: ubyte
- InSandstorm: boolean
- currentSpice: int
- maxSpice: int
- attackDamage: int
- currentField: Field
- szenario: Szenario
- name: String
- clonable: boolean
- affiliated: byte

+ move(direction: Coordinate): boole
+ attack()
+ collectSpice(field: Field)
+ donateSpice(value: byte)
+ chowed()

Field
- accessible: boolean
- heightNiveau: enum
- type: enum
- spice: int
- coordinates: Coordinates

+ setType(type)
+ setSpice(value: int)
+ getSpice(): int
+ getAccessible(): boolean
+ getHeightNiveau: enum
+ getCoordinates(): Coordinates

Mentat
- type: enum

+ SpiceHoarding()
+ getType(): enum

BeneGesserit
- type: enum

+ voice()
+ getType: enum

Extends

Coordinates
- X_COORDINATE
- Y_COORDINATE

+ getX()
+ getY()

Sandworm
- active: boolean
- currentField: Field
- isShaiHulud: boolean
- followsFigure: Figure

Noble

Noble

- type: enum

+ kanly()

+ familyAtomics()

+ getType: enum

△
Extends

Fighter

- type: enum

+ swordSpin()

+ getType(): enum

+ move()

+ becomeShaiHulud()

+ eat()

+ retire()

+ spawn()