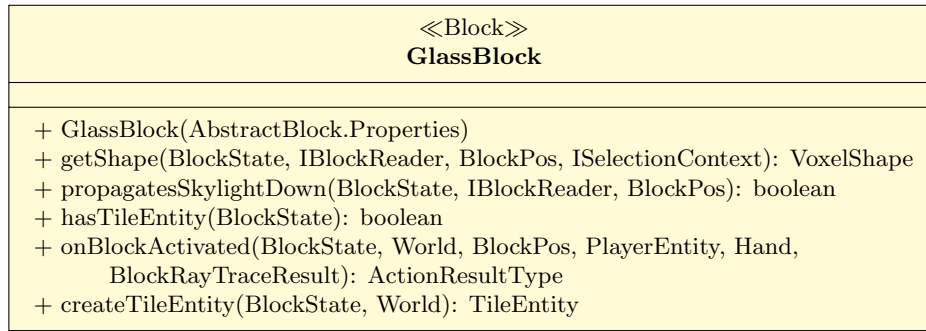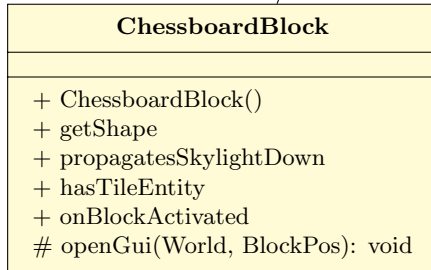**ChessboardBlock Class Diagram**

```
                        ≪Block≫
                       GlassBlock

+ GlassBlock(AbstractBlock.Properties)
+ getShape(BlockState, IBlockReader, BlockPos, ISelectionContext): VoxelShape
+ propagatesSkylightDown(BlockState, IBlockReader, BlockPos): boolean
+ hasTileEntity(BlockState): boolean
+ onBlockActivated(BlockState, World, BlockPos, PlayerEntity, Hand,
        BlockRayTraceResult): ActionResultType
+ createTileEntity(BlockState, World): TileEntity
```
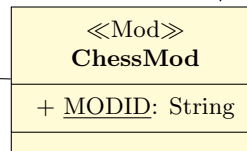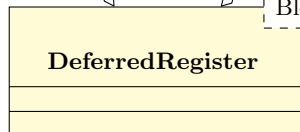
These aren't really defined in here, but for convenience and so we can shorthand what we **actually** override below...

```
              ChessboardBlock

+ ChessboardBlock()
+ getShape
+ propagatesSkylightDown
+ hasTileEntity
+ onBlockActivated
# openGui(World, BlockPos): void
```

In the constructor we define default Hardness, Resistance and Light Level basecon Material for all the other Chessboards. They just call their superconstructor to get this. We also define the getShape method so the Chessboard gets outlined properly when looked at.

```
   WoodChessboardBlock

+ createTileEntity
# openGui
```

```
   GoldChessboardBlock

+ createTileEntity
# openGui
```
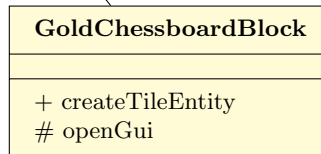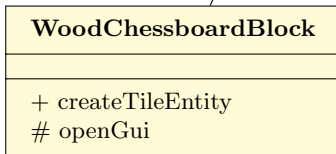
ChessMod is the entry-point to the Mod. It registers the various blocks to a DeferredRegister so that they're known about later. I hide the exact process for registering the Blocks here as it's pretty much Forge-Version-specific (or depends on whom you ask), but the idea is that Forge needs to know about your Blocks for later.

```
Block
```

```
   DeferredRegister


```

-BLOCKS

```
        ≪Mod≫
       ChessMod

+ MODID: String
```

All The Chessboard Blocks

WoodChessboardBlock

+ createTileEntity
# openGui

GoldChessboardBlock

+ createTileEntity
# openGui

ChessboardBlock

+ ChessboardBlock()
+ getShape
+ propagatesSkylightDown
+ hasTileEntity
+ onBlockActivated
# openGui(World, BlockPos): void

QuantumChessboardBlock

+ createTileEntity
# openGui

TournamentChessboardBlock

+ createTileEntity
# openGui

AIChessboardBlock

+ createTileEntity
# openGui

PuzzleChessboardBlock

+ createTileEntity
# openGui

≪Mod≫
ChessMod

+ MODID: String

-BLOCKS

Block

DeferredRegister

ChessboardTileEntity Design

TileEntity

+ TileEntity(TileEntityType¡?¿)
+ onLoad(): void
+ getRenderBoundingBox(): AxisAlignedBB
+ read(BlockState, CompoundNBT):void
+ write(CompoundNBT): CompoundNBT
+ getUpdatePacket(): SUpdateTileEntityPacket
+ onDataPacket(NetworkManager, SUpdateTileEntityPacket): void
+ getUpdateTag(): CompoundNBT
+ handleUpdateTag(BlockState, CompoundNBT): void

ChessboardTileEntity

Board: board

+ ChessboardTileEntity(TileEntityType¡?¿)
+ onLoad
+ getRenderBoundingBox
+ read
+ write
+ getUpdatePacket
+ onDataPacket
+ getUpdateTag
+ handleUpdateTag
+ getBoard(): Board
+ notifyClientOfBoardChange(): void

WoodChessboardTileEntity

+ WoodChessboardTileEntity(TileEntityType¡?¿)

GoldChessboardTileEntity

+ GoldChessboardTileEntity(TileEntityType¡?¿)