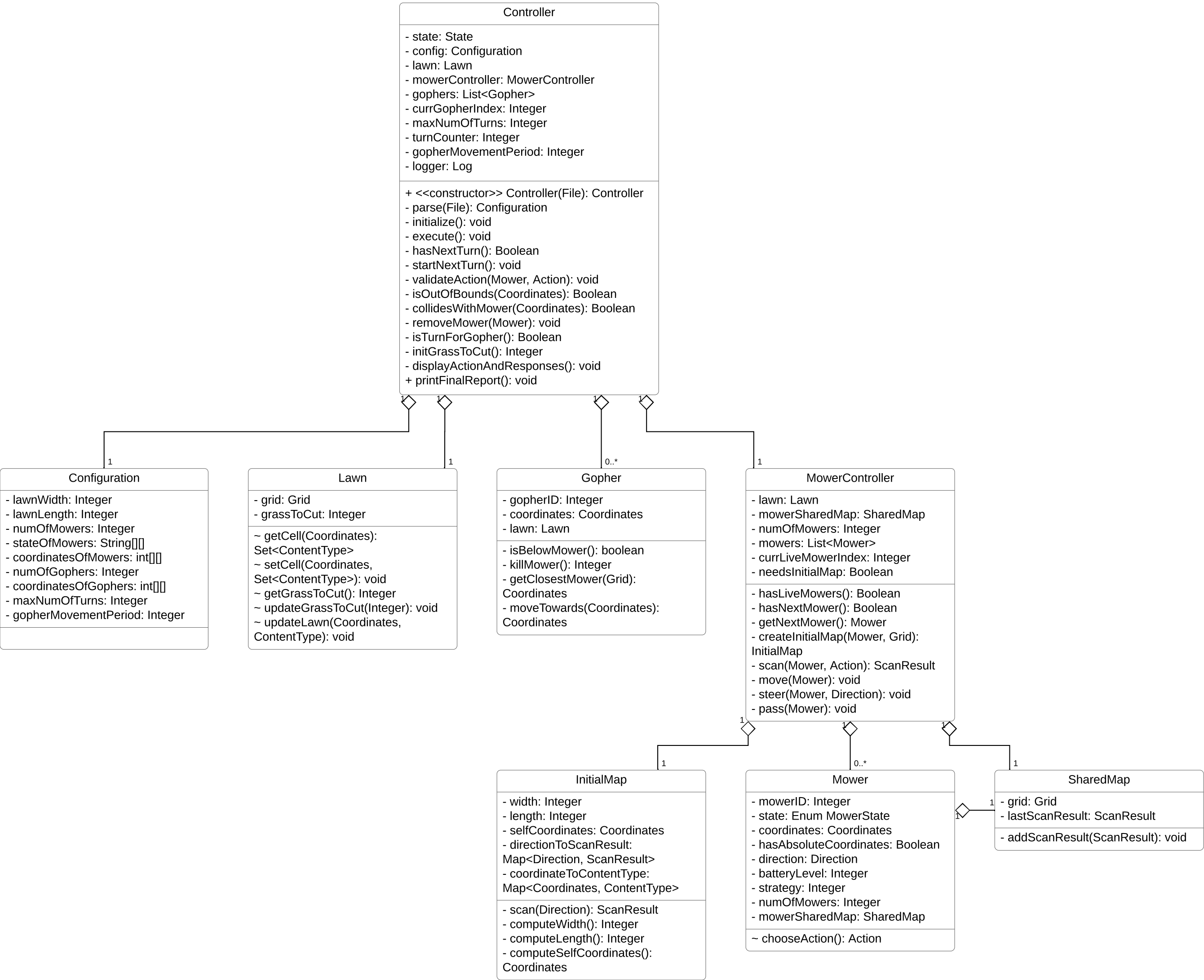


CS6310 A4
OsMowSis Class Diagram
Yun Zhang | UML 2.0



| <<utility>> Coordinates |
|------------------------------|
| - x: Integer - y: Integer |
| |

| <<utility>> Grid |
|--|
| - <u>INIT_WIDTH</u> : Integer - <u>INIT_LENGTH</u> : Integer - <u>EXPANDING_FACTOR</u> : Integer - grid: Set<ContentType>[][] |
| ~ getCell(Coordinates): Set<ContentType> ~ setCell(Coordinates, Set<ContentType>): void - needsExpansion(): Boolean - expand(): void - isOutOfBounds(Coordinates): Boolean |

| <<utility>> ScanResult |
|--|
| - type: Action - coordinates: List<Coordinates> - data: List<Set<ContentType>> |
| |

| <<utility>> Parser |
|--|
| - <u>COORDINATE_PATTERN</u> : Pattern - <u>MOWER_PATTERN</u> : Pattern - fileName: String - lineIndex: Integer - infile: BufferedReader - config: Configuration |
| + Parser(String) ~ parse(): Configuration |

| <<utility>> Strategy |
|--|
| |
| ~ <u>randomAction()</u> : Action ~ <u>randomDirection()</u> : Direction ~ <u>straightFirst(Mower)</u> : Action - <u>searchForContentType(Mower, ContentType)</u> : Action |

| <<utility>> Log |
|---|
| - data: StringBuilder - regularLog: BufferedWriter |
| ~ log(): void ~ end(): void |

| <<enumeration>> State |
|---|
| STARTING INITIALIZING RUNNNING ENDED |
| |

| <<enumeration>> MowerState |
|---|
| LIVE OUT_OF_BATTERY KILLED_BY_COLLISION KILLED_BY_GOPHER |
| |

| <<enumeration>> ContentType |
|--|
| GRASS NO_GRASS MOWER CHARGING_PAD GOPHER |
| |

| <<enumeration>> Direction |
|--|
| NORTH SOUTH EAST WEST NORTHWEST NORTHEAST SOUTHWEST SOUTHEAST |
| |

| <<enumeration>> Action |
|---|
| MOVE STEER CSCAN LSCAN PASS OTHER |
| + getCost(): Integer + lookupByName(String): Action |