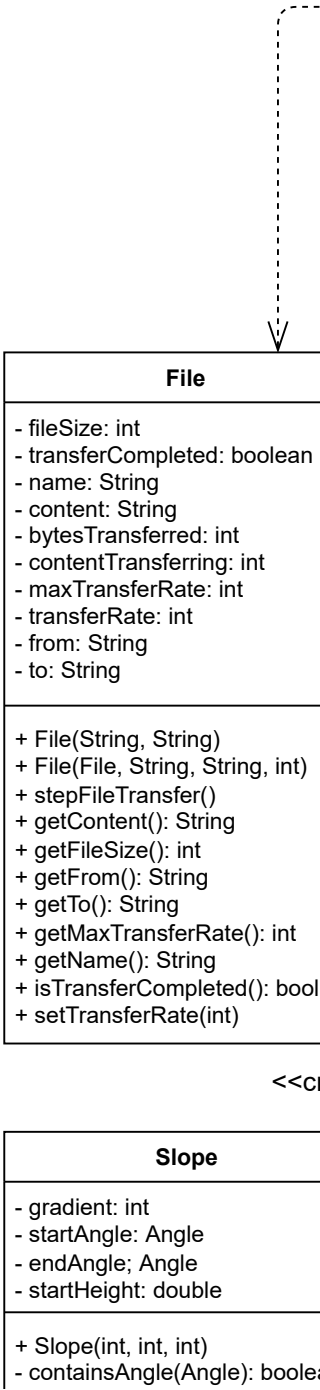
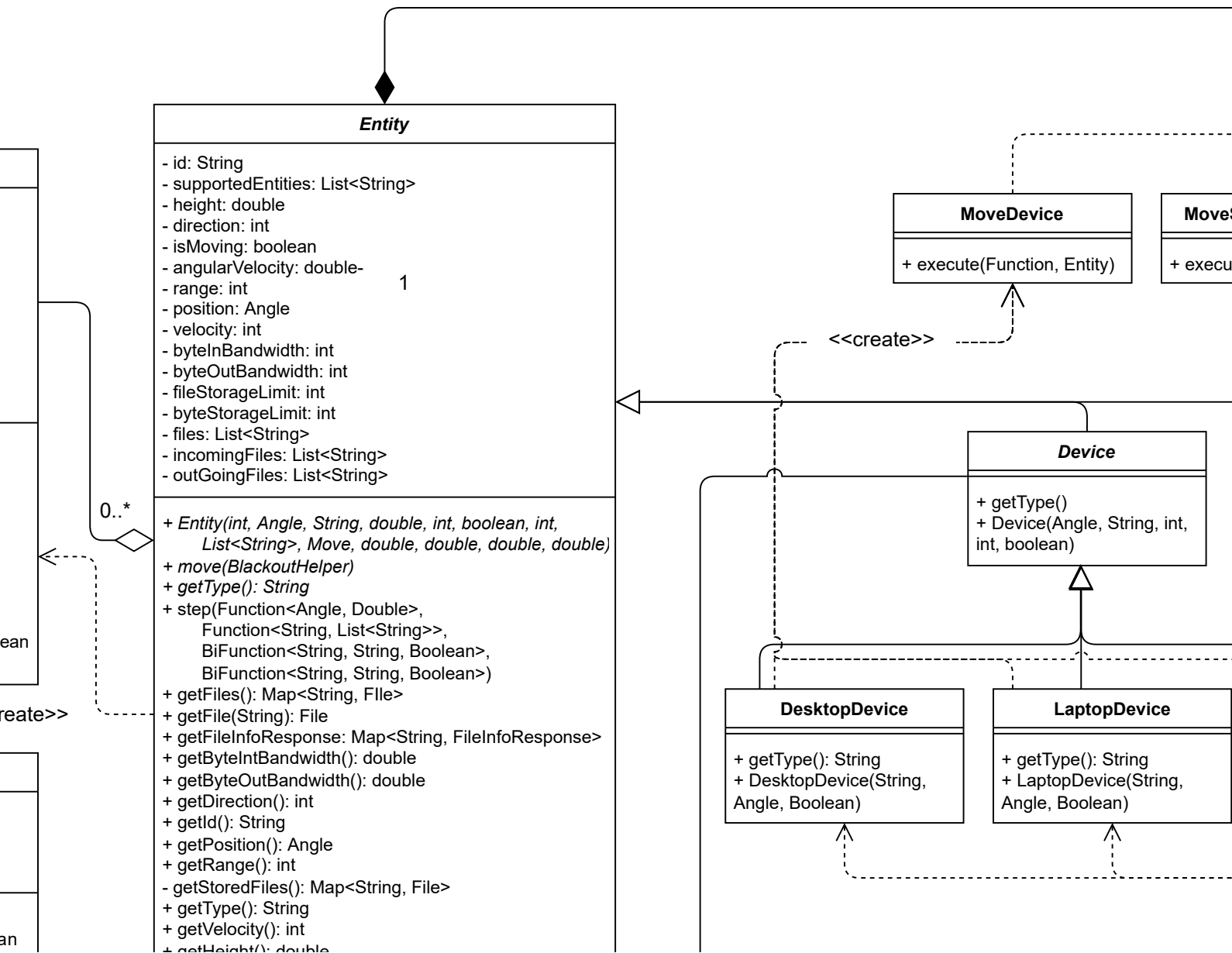
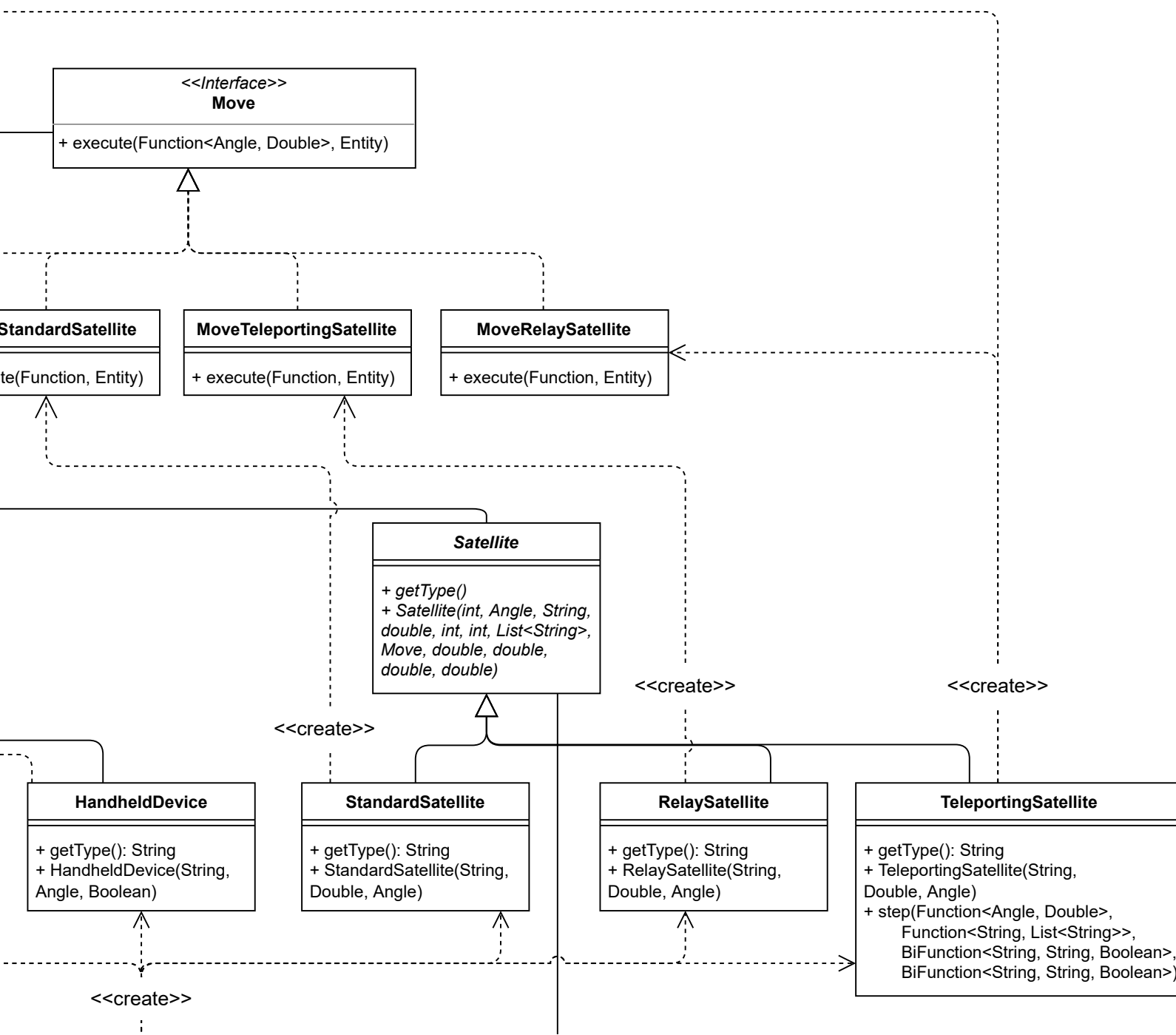
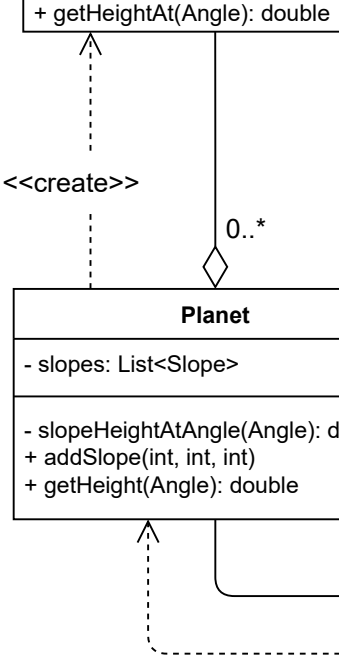
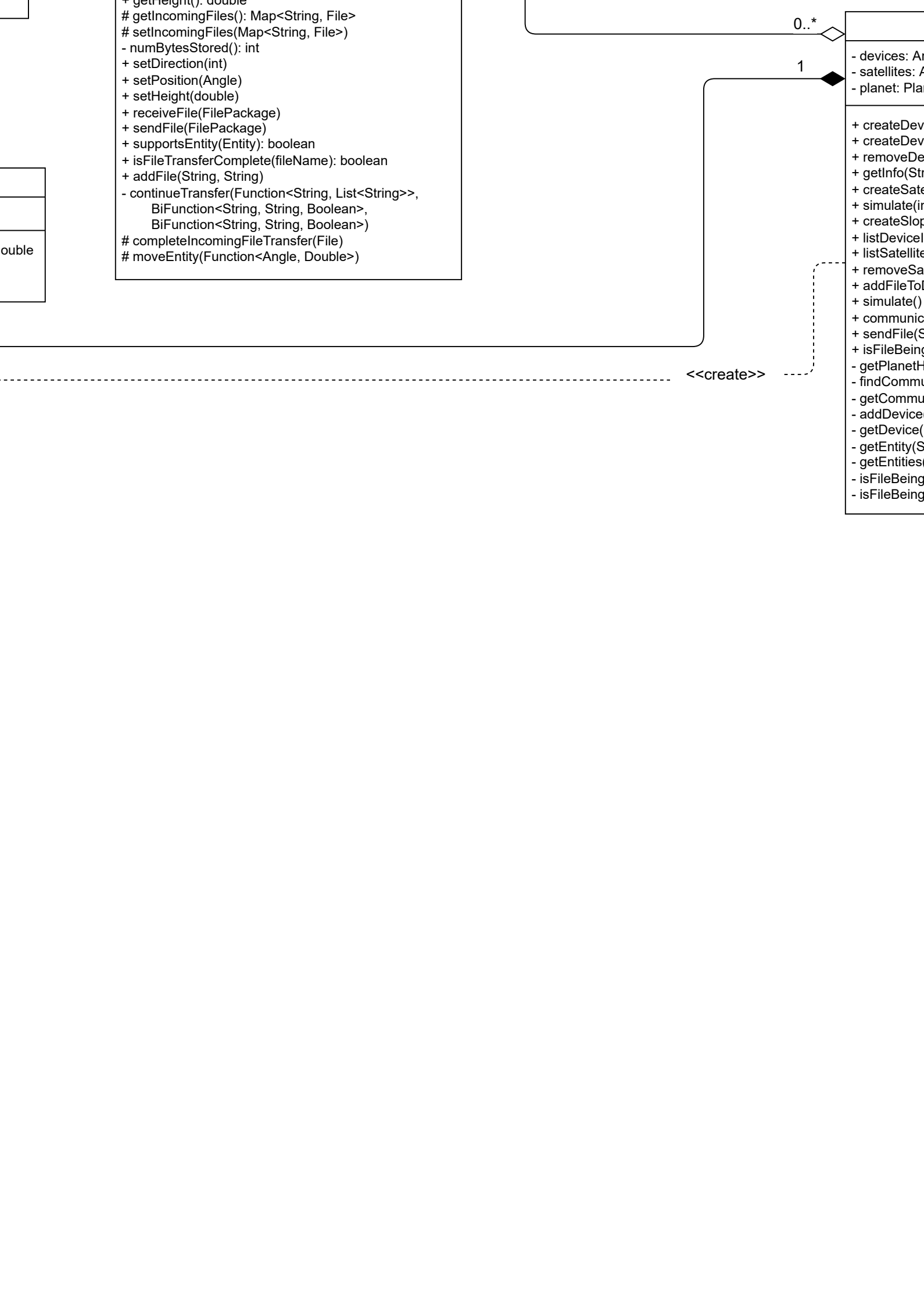
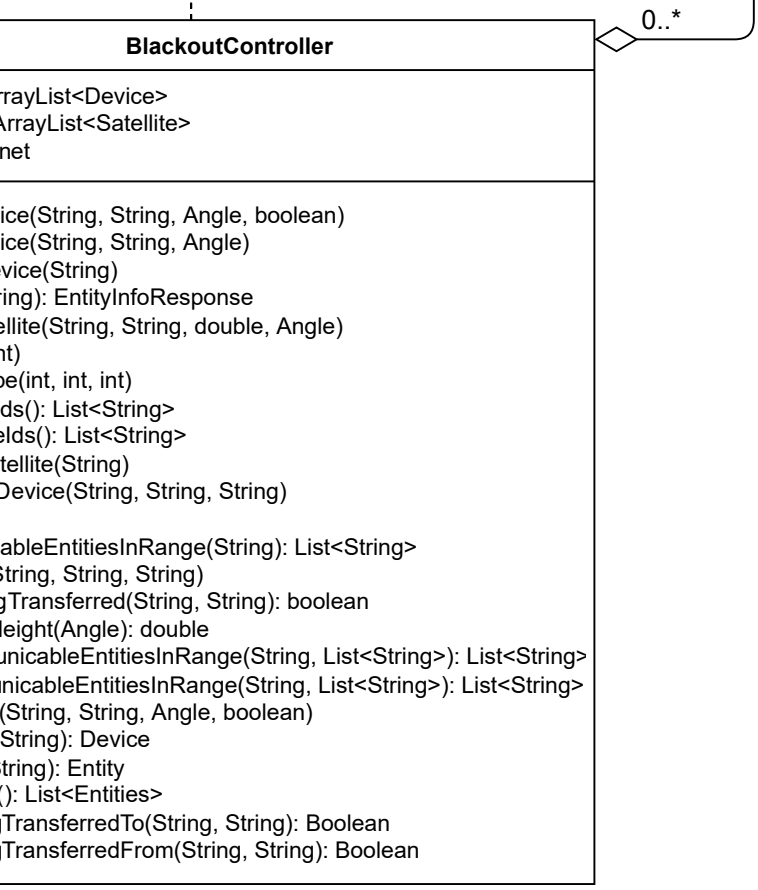

File
- fileSize: int
- transferCompleted: boolean
- name: String
- content: String
- bytesTransferred: int
- contentTransferring: int
- maxTransferRate: int
- transferRate: int
- from: String
- to: String
+ File(String, String)
+ File(File, String, String, int)
+ stepFileTransfer()
+ getContent(): String
+ getFileSize(): int
+ getFrom(): String
+ getTo(): String
+ getMaxTransferRate(): int
+ getName(): String
+ isTransferCompleted(): bool
+ setTransferRate(int)
<<c
Slope
- gradient: int
- startAngle: Angle
- endAngle; Angle
- startHeight: double
+ Slope(int, int, int)
- containsAngle(Angle): boolea


Entity
- id: String
- supportedEntities: List<String>
- height: double
- direction: int
- isMoving: boolean
- angularVelocity: double-
- range: int
- position: Angle
- velocity: int
- byteInBandwidth: int
- byteOutBandwidth: int
- fileStorageLimit: int
- byteStorageLimit: int
- files: List<String>
- incomingFiles: List<String>
- outGoingFiles: List<String>
1
0..*
+ Entity(int, Angle, String, double, int, boolean, int, List<String>, Move, double, double, double, double)
+ move(BlackoutHelper)
+ getType(): String
+ step(Function<Angle, Double>, Function<String, List<String>>, BiFunction<String, String, Boolean>, BiFunction<String, String, Boolean>)
+ getFiles(): Map<String, FIle>
+ getFile(String): File
+ getFileInfoResponse: Map<String, FileInfoResponse>
+ getByteIntBandwidth(): double
+ getByteOutBandwidth(): double
+ getDirection(): int
+ getId(): String
+ getPosition(): Angle
+ getRange(): int
- getStoredFiles(): Map<String, File>
+ getType(): String
+ getVelocity(): int
MoveDevice
+ execute(Function, Entity)
<<create>>
Device
+ getType()
+ Device(Angle, String, int, int, boolean)
DesktopDevice
+ getType(): String
+ DesktopDevice(String, Angle, Boolean)
LaptopDevice
+ getType(): String
+ LaptopDevice(String, Angle, Boolean)


<<Interface>>
Move
+ execute(Function<Angle, Double>, Entity)
StandardSatellite
te(Function, Entity)
MoveTeleportingSatellite
+ execute(Function, Entity)
MoveRelaySatellite
+ execute(Function, Entity)
Satellite
+ getType()
+ Satellite(int, Angle, String, double, int, int, List<String>, Move, double, double, double, double)
<<create>>
<<create>>
<<create>>
HandheldDevice
+ getType(): String
+ HandheldDevice(String, Angle, Boolean)
StandardSatellite
+ getType(): String
+ StandardSatellite(String, Double, Angle)
RelaySatellite
+ getType(): String
+ RelaySatellite(String, Double, Angle)
TeleportingSatellite
+ getType(): String
+ TeleportingSatellite(String, Double, Angle)
+ step(Function<Angle, Double>, Function<String, List<String>>, BiFunction<String, String, Boolean>, BiFunction<String, String, Boolean>)
<<create>>


+ getHeightAt(Angle): double
<<create>>
0..*
Planet
- slopes: List<Slope>
- slopeHeightAtAngle(Angle): d
+ addSlope(int, int, int)
+ getHeight(Angle): double


+ getHeight(): double
# getIncomingFiles(): Map<String, File>
# setIncomingFiles(Map<String, File>)
- numBytesStored(): int
+ setDirection(int)
+ setPosition(Angle)
+ setHeight(double)
+ receiveFile(FilePackage)
+ sendFile(FilePackage)
+ supportsEntity(Entity): boolean
+ isFileTransferComplete(fileName): boolean
+ addFile(String, String)
- continueTransfer(Function<String, List<String>>,
BiFunction<String, String, Boolean>,
BiFunction<String, String, Boolean>)
completeIncomingFileTransfer(File)
moveEntity(Function<Angle, Double>)
ouble
0..*
1
- devices: Ar
- satellites: A
- planet: Pla
+ createDev
+ createDev
+ removeDe
+ getInfo(Str
+ createSate
+ simulate(in
+ createSlop
+ listDeviceI
+ listSatellite
+ removeSa
+ addFileToD
+ simulate()
+ communic
+ sendFile(S
+ isFileBeing
- getPlanetH
- findCommu
- getCommu
- addDevice(
- getDevice(
- getEntity(S
- getEntities(
- isFileBeing
- isFileBeing
<<create>>


0..*
BlackoutController
rrayList<Device>
ArrayList<Satellite>
net
ice(String, String, Angle, boolean)
ice(String, String, Angle)
vice(String)
ring): EntityInfoResponse
llite(String, String, double, Angle)
nt)
pe(int, int, int)
ds(): List<String>
elds(): List<String>
tellite(String)
Device(String, String, String)
ableEntitiesInRange(String): List<String>
String, String, String)
gTransferred(String, String): boolean
leight(Angle): double
unicableEntitiesInRange(String, List<String>): List<String>
unicableEntitiesInRange(String, List<String>): List<String>
(String, String, Angle, boolean)
String): Device
tring): Entity
(): List<Entities>
gTransferredTo(String, String): Boolean
gTransferredFrom(String, String): Boolean