Package:: cscd212classes.lab5.lifeform
<<Abstract>>
LifeForm

- name: String
currentLifePoints: int
MAX_LIFE_POINTS: int

+ LifeForm(name:String, currentLifePoints: int)
+ LifeForm(name:String, currentLifePoints: int, maxLifePoints: int)
+ getLifePoints(): int
+ getName(): String
+ takeHit(damage: int): void
+ toString(): String

△ —— Extends ——   —— Extends ——

Package:: cscd212classes.lab5.lifeform
Human

- armorPoints: int

+ Human(name:String, currentLifePoints: int)
+ Human(name:String, currentLifePoints: int, maxLifePoints: int, armorPoints: int)
+ getArmorPoints(): int
+ setArmorPoints(armorPoints: int): void
+ takeHit(damage: int): void
+ toString(): String

Package:: cscd212classes.lab5.lifeform
<<Abstract>>
Alien

- recovery: RecoveryBehavior

+ Alien(name:String, currentLifePoints: int)
+ Alien(name:String, currentLifePoints: int, maxLifePoints: int, recovery: RecoveryBehavior)
+ setCurrentLifePoints(currentLifePoints: int): void
+ setRecoveryBehavior(recovery: RecoveryBehavior): void
+ getRecoveryBehavior(): RecoveryBehavior
+ recover(): String
+ toString(): String

Package:: cscd212interfaces.lab5.recovery
<<Interface>>
RecoveryBehavior

+ <<Abstract>> _calculateRecovery_(currentLifePoints: int): int

△ —— Extends ——   —— Extends ——

Package:: cscd212classes.lab5.lifeform
StarBellySneetch

+ StarBellySneetch(name:String, currentLifePoints: int)
+ StarBellySneetch(name:String, currentLifePoints: int, maxLifePoints: int, recovery: RecoveryBehavior)

Package:: cscd212classes.lab5.lifeform
Martian

+ Martian(name:String, currentLifePoints: int)
+ Martian(name:String, currentLifePoints: int, maxLifePoints: int, recovery: RecoveryBehavior)

Package:: cscd212classes.lab5.recovery
RecoveryNone

+ calculateRecovery(currentLifePoints: int): int

Package:: cscd212classes.lab5.recovery
RecoveryLinear

- recoveryStep: int

+ RecoveryLinear(recoveryStep: int)
+ calculateRecovery(currentLifePoints: int): int

Package:: cscd212classes.lab5.recovery
RecoveryFractional

- BASE_RECOVERY: int
- recoveryPercent: double

+ RecoveryFractional(recoveryPercent: double, baseRecovery: int)
+ RecoveryFractional(recoveryPercent: double)
+ calculateRecovery(currentLifePoints: int): int