CO225-Software Construction E/17/219 K.G.I.S. Nawarathna

Dept. of Computer Engineering

Class Diagram

Point

-x: int -y: int

+getX(): double
+getY(): double

complexNumber

-real: double

+setReal(): void
+setImg(): void
+getReal(): double
+getImg(): double

+getSquareOfAbs()(): double

+comAddition(): void
+comSquare(): void

+getComplexInfo() (): void

MappedComplex

-heightDiff: double
-widthDiff: double

-hScalingFactor: double -wScalingFactor: double

+setValues(): void

Fractal

+panelJulia(): Panel

+panelMandelbrot(): Panel

+main(): void

Panel

JPanel

+...()

. . . .

-width: int
-height: int
-type: String
-iter: int

-c: complexNumber
-left: double
-right: double
-down: double
-up: double

+setIter(): void
+setComplex(): void
+setRegion(): void
+printPoint(): void
+Coloring(): void
+paintComponent(): void

MandelbrotNumber

-iterations: int -counter: int

+isMandelbrot(): boolean
+getIter() (): int

JuliaNumber

-iterations: int
-counter: int
+c: complexNumber

+isJulia(): boolean
+getIter() (): int