Map Editor

Definition
Separate the construction of a complex object from its representation so that the
same construction process can create different representations.

Viewing Option

natural
userModified
potCount
metalCount
charcoalCount
magnetometerResult
metalDetectorResult

Feature

stone
postHole
dirt

Artifact

date

setDate(int date)
getDate()

has a collection of ———— 0..1

Map

charMap
plane
rows
columns
viewingOption

Map(rows, columns)
addPlaneItem(row, column, item)
getPlaneItem(row, column)
getCharMap()
setMapSymbol(row, column, symbol)
getViewingOption()
setViewingOption(ViewingOption)

Entry Point

ui
map

main(String args)
go()

Coordinate

row
column
feature
potCount
metalCount
charcoalCount

addFind(Artifact)
itemFound()
getExcavated()

1..*

Pot

Metal

abstract respondToMetalDetector()

Charcoal

GUI

SubController

displayMenu()

SubController

map

magnetoMeter(row, column)
metalDetector(row, column)
visibleSpectrum(row, column)
dig(row, column)
computeAverageDate()
computeStandardDeviation(avg)

1..*

uses
0..1

Submerged

depth

getDepth()
setDepth(depth)

Storage

volume

getVolume()
setVolume(volume)

Decorated

description

getDescription()
setDescription(description)

Ferrous

signalStength

getSignalStrength()
setSignalStrength(signalStrength)
respondToMetalDetector()

Nonferrous

type

getType()
setType(type)
respondToMetalDetector()

Kiln

radius

getRadius()
setRadius(radius)

Hearth

length
width

getLength()
getWidth()
setLength(length)
setWidth(width)

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uses

1..*

uses
0..1

Utilities

load(path)
save(Map, path)
generateMap(width, height)
printMap(Map, output)
columnToIndex(column)
indexToColumn(index)

0..1

MapEditor

updateView(Map)
countNumberOfFinds(Map)