Package 'UnitCircle'

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Type Package

Title Check if Roots of a Polynomial Lie Outside the Unit Circle

Version 0.1.3

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Description The uc.check() function checks whether the roots of a given polynomial lie outside the Unit circle. You can also easily draw an unit circle.

License GPL-3

Encoding UTF-8

RoxygenNote 6.0.1

URL https://github.com/BerriJ/UnitCircle

BugReports https://github.com/BerriJ/UnitCircle/issues

NeedsCompilation no

Repository CRAN

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R topics documented:

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uc.check   *Check if Roots of a Polynomial Lie Outside the Unit Circle*

Description

This function outputs the roots of a given polynomial. It also checks whether they lie outside the unit circle and creates a plot to illustrate the results in an intuitive way.

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Usage

```
uc.check(pol_, plot_output = T, print_output = T)
```

Arguments

`pol_`	the vector of polynomial coefficients in increasing order.
`plot_output`	Logical that defines whether to create a plot.
`print_output`	Logical that defines whether to print the results.

Examples

```
uc.check(pol_ = c(1,0,0.999999999), plot_output = FALSE)

uc.check(pol_ = c(2,0,2.2,-3), plot_output = TRUE)
```

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