Beta Presentation

General RAte Calculation Environment Shell

The Capstone Experience

Team Delta Dental Knowledge Science 2

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Project Overview

• The multitude of factors to consider make rate calculation a very convoluted process

• Solution architecture General RAte Calculation Environment (GRACE) and its DSL are aimed to tackle these challenges

• Create a REPL shell to add console level support for GRACE so that anyone can use the tool effectively
System Architecture

Interactive Shell

User

Development

Query

Response

GRACE Core Libraries

Maven

IJ

REPL

picocli
Starting and Help Command

```
david@Davids-MBP GRACE-Shell % ./grace
GRACE>>> label

Usage:

label [-hv] [COMMAND]

Description:

Handles a label command and its various options

Options:

- h, --help      Displays this message.
- v, --verbose   Output more command information.

Commands:

  delete, --delete, -d Delete the label with the given name
  list, --list, -l     Lists all current labels
  spec, --spec, -s    Creates or updates a label depending on whether the
                       name exists

GRACE>>>  
```
Some Example Commands
Importing files

```
david@Davids-MBP $ grace
GRACE>>> program -l ../test
Importing file: ../test
>>> program ls
  generated-sources
  classes
  archive-tmp
  maven-status
  maven-archiver
GRACE-Shell-0.1-jar-with-dependencies.jar
GRACE-Shell-0.1.jar
>>> label -l
>>> let CreatedLabel [val1, val2, val3] = 5
CreatedLabel[val1, val2, val3] = 5
>>> label spec AnotherNewLabel val4 val5 val6
Creating label: AnotherNewLabel
with values:
  val4 val5 val6
>>> label -l
AnotherNewLabel: [val4, val5, val6]
>>> label -d AnotherNewLabel
Deleting label: AnotherNewLabel
>>> label -l
-- INSERT --
```

Errors

```
GRACE>>> exit
david@Davids-MBP GRACE-Shell % ./grace
GRACE>>> label spec
Missing required parameter: '<labelName>'
Usage: label spec <labelName> [[<label_values>]]
Creates or updates a label depending on whether the name exists
If no label values are included, displays the label
   <labelName>
   [[<label_values>]]

GRACE>>> program -i -e file
Error: expected only one match but got [[-f] file to import/export (-i | -e)]=[
    --import] and [[-f] file to import/export (-i | -e)]=[params[0]=file --export]
Usage: program [-v] [[-f] file to import/export (-i | -e) [COMMAND]
    file to import/export
    -e, --export
    -f, --force
    -i, --import
    -v, --verbose
Commands:
   clear, cls
   ls, -l
GRACE>>> exit
```
What’s left to do?

• Features
  ▪ Function and Script collisions

• Stretch Goals
  ▪ Intercepting and interpreting Picocli/GRACE errors

• Other Tasks
  ▪ Document non-command functions
  ▪ Clean up codebase
  ▪ Fix deployment issues on windows
  ▪ Consistent output styling (format and coloring)
Questions?