CMSC 150
Exercise 10
User's Guide

Jonas R. Atienza
AB-3L

About the application

This application is written using the **R** language. It uses the R library—"**shiny**"—as its web UI framework.

Aside from **shiny**, it is also dependent to the libraries "**gridlayout**" and "**DT**".

The three libraries can be installed from **CRAN** using:

```
> install.packages("shiny")
> install.packages("gridlayout")
> install.packages("DT")
```

This application also imports past and new/modified helper codes.

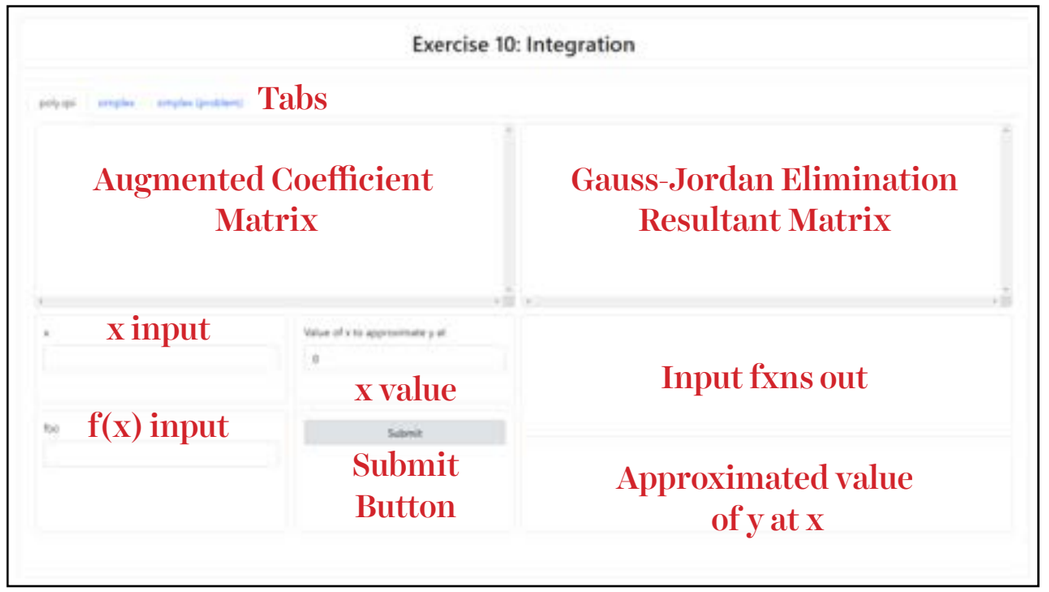
Namely:
"AtienzaEx08.R"
"AtienzaEx09.R"
"AugCoeffMatrix.R"
"LinearAlgebra.R"
"RegexHelper.R"

```
source("AtienzaEx08.R")
source("AtienzaEx09.R")
source("RegexHelper.R")
```

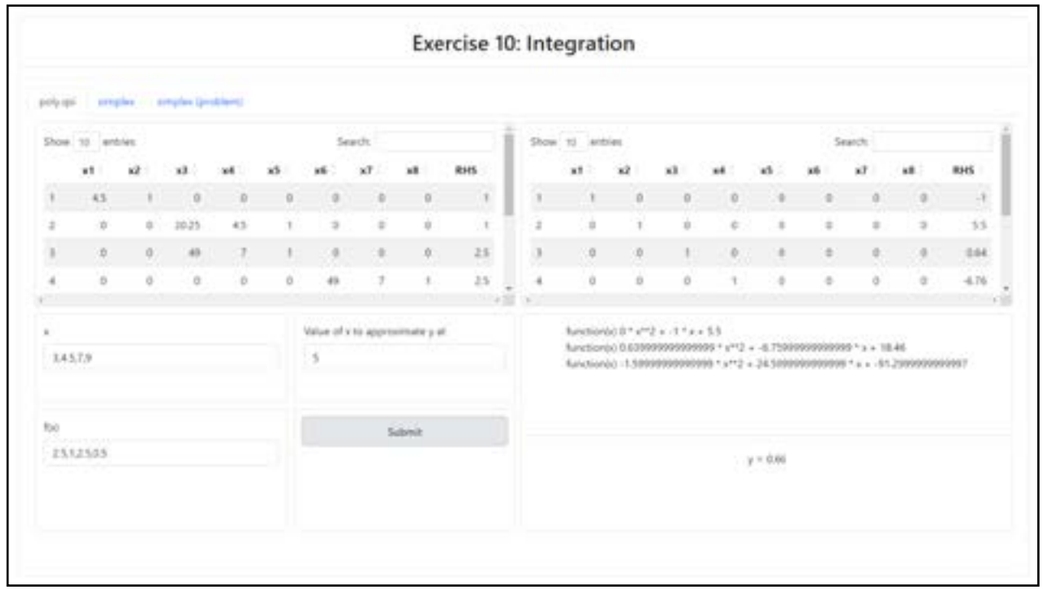
* AugCoeffMatrix.R and LinearAlgebra.R" are imported by AtienzaEx09.R

Approximating a value using Quadratic Spline Interpolation

Parts of the UI



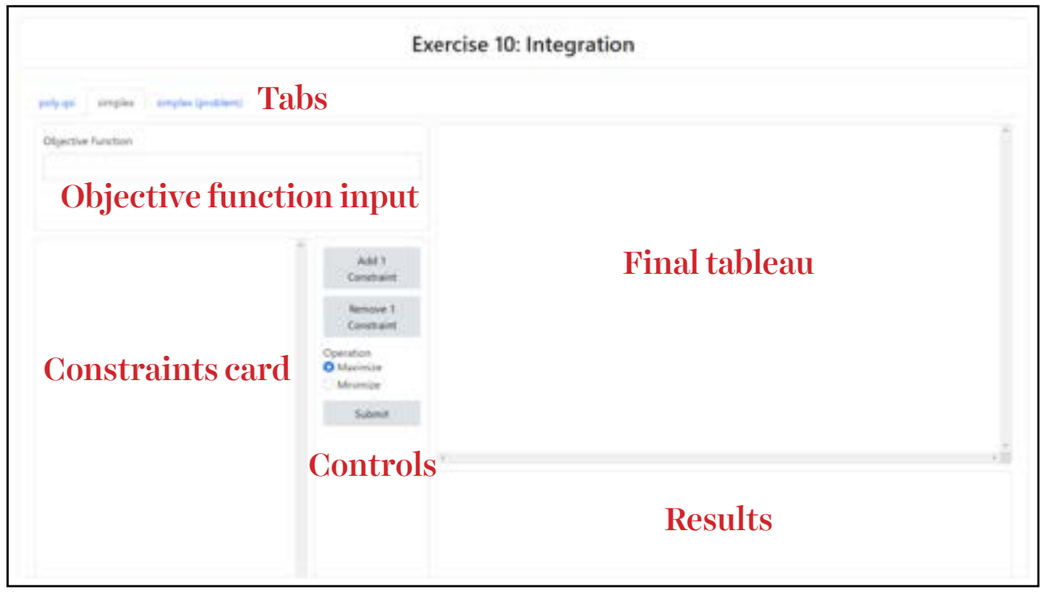
How to use?



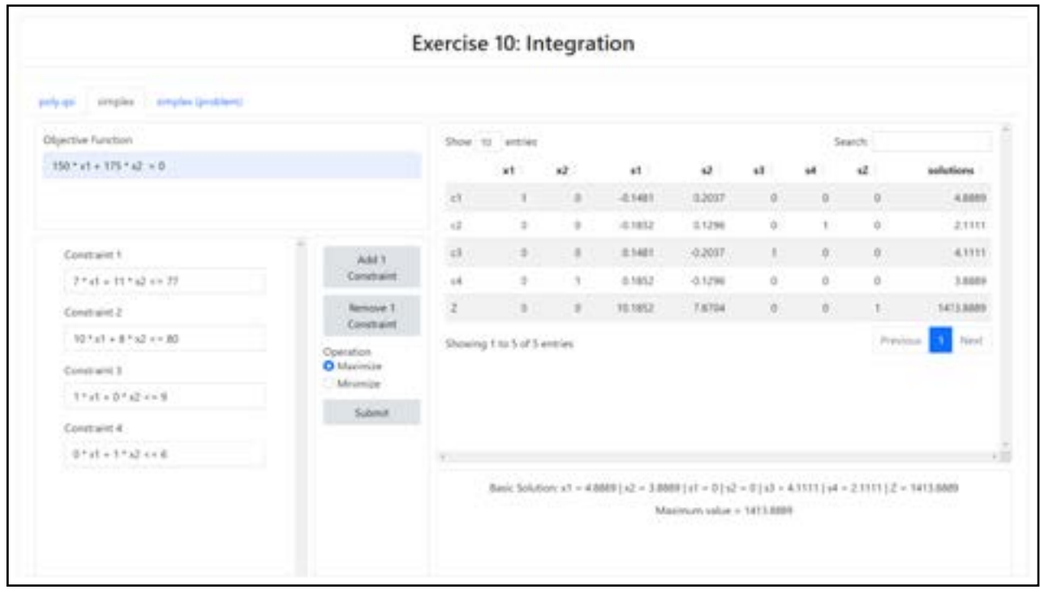
—> Simply enter values and click submit

Simplex Method

Parts of the UI



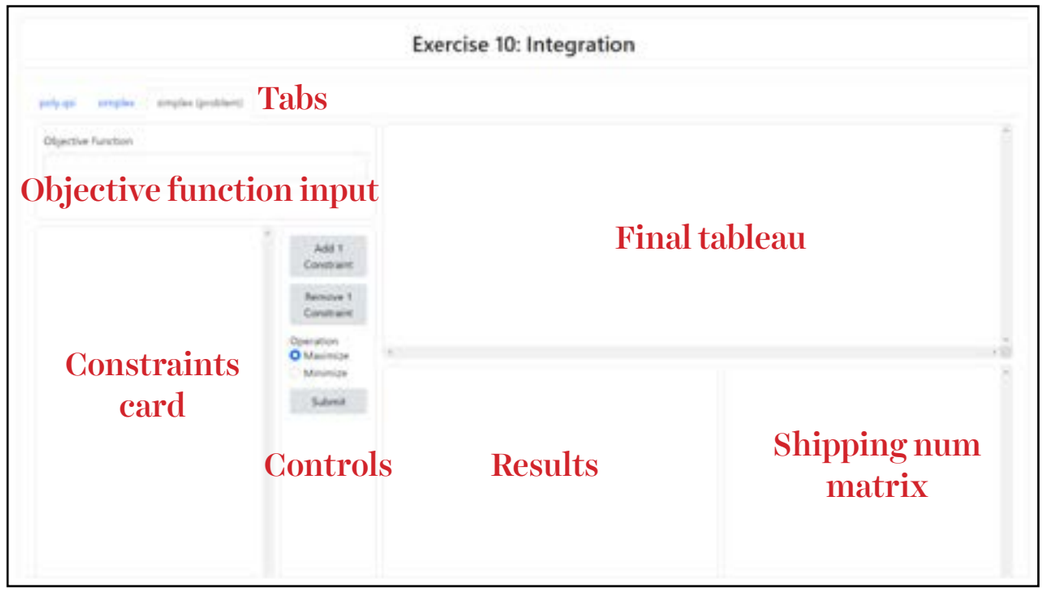
How to use?



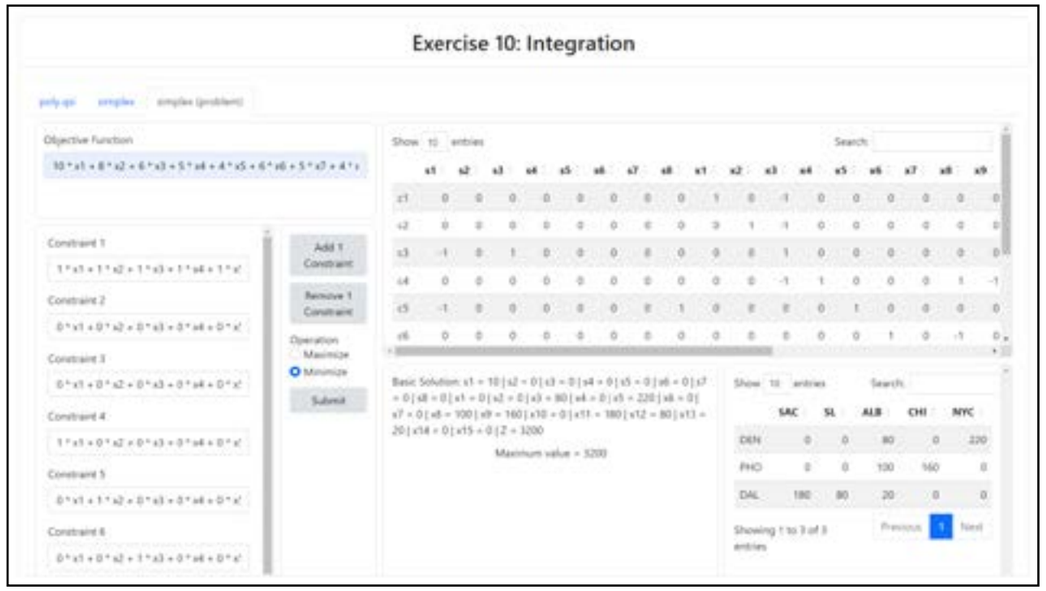
—> Add as much constraints needed using the add constraints button
—> Enter objective function and constraints in equation form
—> Submit values

Simplex Method (Shipping word problem)

Parts of the UI



How to use?



—> Add as much constraints needed using the add constraints button
—> Enter objective function and constraints in equation form
—> Submit values