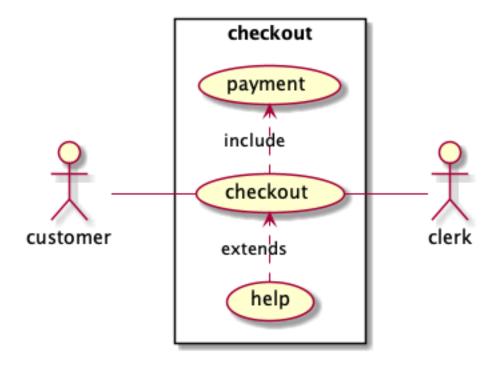
Diagram

```
Ostartuml ExampleUseCase
' This is an example comment
left to right direction
actor customer
actor clerk
rectangle checkout {
  customer -- (checkout)
  (checkout) .> (payment) : include
  (help) .> (checkout) : extends
  (checkout) -- clerk
@enduml
@startuml ExampleUseCase900
skinparam dpi 900
' This is an example comment
left to right direction
actor customer
actor clerk
rectangle checkout {
  customer -- (checkout)
  (checkout) .> (payment) : include
  (help) .> (checkout) : extends
  (checkout) -- clerk
}
@enduml
```

ExampleUseCase.png



 ${\bf Figure~1:~ExampleUseCase.png}$

This ExampleUseCase.png image is the original diagram generated by PlantUML.

GeneratingExampleUseCase.png

```
[Preethas-MBP:~/Documents/Github/portfolio5-UP2036098] tptommy25% plantuml Diagram.puml -tpng -output images [Preethas-MBP:~/Documents/Github/portfolio5-UP2036098] tptommy25% ls ExampleUseCase.* ls: No match. [Preethas-MBP:~/Documents/Github/portfolio5-UP2036098] tptommy25% ls CheckList.md Diagram.puml LICENSE README.md Student.ID build images [Preethas-MBP:~/Documents/Github/portfolio5-UP2036098] tptommy25% cd images [Preethas-MBP:Github/portfolio5-UP2036098/images] tptommy25% ls ExampleUseCase.* ExampleUseCase.png [Preethas-MBP:Github/portfolio5-UP2036098/images] tptommy25%
```

Figure 2: GeneratingExampleUseCase.png

This image shows how ExampleUseCase.png image is generated using the command line with "plantuml Diagram.puml -tpng -output images" and adding it in the images folder.

ExampleUseCase900.png

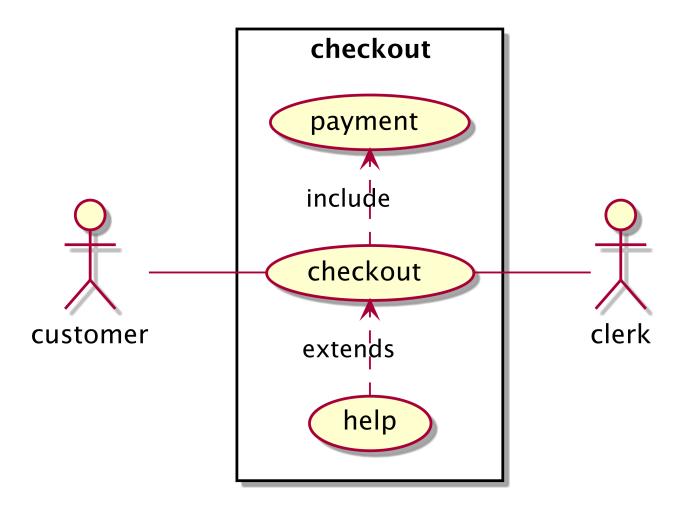


Figure 3: ExampleUseCase900.png

In this diagram, I have changed the resolution by adding "skinparam dpi 900" to the second diagram contents. Comparing to the original diagram, this diagram is more clearer even after zooming in the image has high resolution image.

ExampleUseCase900Resolution.png

```
f=ExampleUseCase
                                       Relative, so let's change it f=/Users/tptommy25/Documents/Github/portfolio5-UP2036098/ExampleUseCase
                  Mo)
                               Mο
            130
                               Мо
                  Mo)
                                      Tt's not a directory
ExampleUseCase is not taken as a directory
We are going to put data in [0]
Compilation duration 294
Regex total/invoked/compiled 125/104/54
            130 Mo)
                               Мо
            130 Mo)
                         121 Mo
            130 Mo)
                               Мо
            130 Mo)
                         118 Mo
            130 Mo)
                         118
                               Мо
                                      Matches created 68
Creating file: /Users/tptommy25/Documents/Github/portfolio5-UP2036098/ExampleUseCase.png
Starting Graphviz process [/usr/local/opt/graphviz/bin/dot, -Tsvg]
DotString size: 1175
                         118 Mo
118 Mo
            130 Mo)
            130 Mo)
            130 Mo)
  388
                         122 Mo
                         122 Mo
            130 Mo)
                                   - Ending process ok
- Ending Graphviz process
- Creating image 346x261
            130 Mo)
                         121 Mo
            130 Mo)
                         121 Mo
            130
                  Mo)
                         108 Mo
            130 Mo)
                         99 Mo - name from block=ExampleUseCase900
            130 Mo)
                             Mo -
                                     Checking=ExampleUseCase900
            130 Mo)
                                      f=ExampleUseCase900
                                     Relative, so let's change it f=/Users/tptommy25/Documents/Github/portfolio5-UP2036098/ExampleUseCase900
            130 Mo)
                         99 Mo -
                         99 Mo -
   738
            130 Mo)
                                     It's not a directory
ExampleUseCase900 is not taken as a directory
We are going to put data in [0]
Compilation duration 103
Regex total/invoked/compiled 125/120/57
            130 Mo)
                         99 Mo -
  738
                         99 Mo -
            130 Mo)
1.738
            130 Mo)
                         99 Mo -
            130 Mo)
                         98
                             Mo -
            130
                  Mo)
                             Mo -
                                     Matches created 140
Creating file: /Users/tptommy25/Documents/Github/portfolio5-UP2036098/ExampleUseCase900.png
            130
                  Mo)
                             Мо
            130 Mo)
                             Мо
                                     Starting Graphviz process [/usr/local/opt/graphviz/bin/dot, -Tsvg] DotString size: 1175
            130 Mo)
                             Мо
  885
            130 Mo)
                         92 Mo -
           130 Mo) 91 Mo - Ending process ok
130 Mo) 91 Mo - Ending Graphviz process
130 Mo) 80 Mo - Creating image 3243x2446
130 Mo) 85 Mo - Number of image(s): 2
  923
1.923
6.805
  reethas-MBP:~/Documents/Github/portfolio5-UP2036098] tptommy25% [
```

Figure 4: ExampleUseCase900Resolution.png

To know the resolution of the second image, "plantuml Diagram.puml -v" were executed in the commandline. The image has 3243x2446 dimension which is bigger then the original image with 346x261 dimension only. As we can see there is huge difference in both of this image.

ExampleUseCase.svg

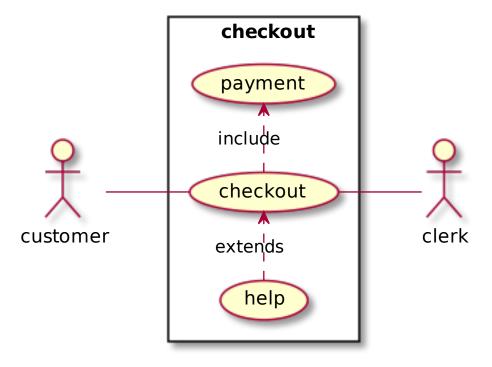


Figure 5: ExampleUseCase.svg

This image is generated as svg image with the PlantUML commandline "plantuml Diagram.puml -tsvg -output images" and adding it to images folder. Since svg images are describe a line as having a start and stop location and then describe the line, it has better quality comparing to the png image generated by PlantUML.

ExampleUseCase900.svg

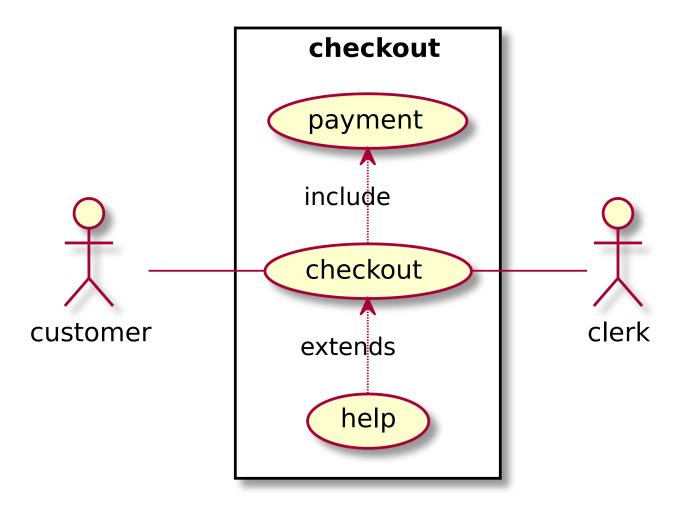


Figure 6: ExampleUseCase900.svg

Same as the previous image, svg has better quality even when zooming in depth. The difference between this two images can be seen clearly because the png image shows pixels of colours and svg image does not.

Checklist

- \boxtimes Portfolio 5 Part 1
- \boxtimes Portfolio 5 Part 2
- \boxtimes Portfolio 5 Part 3
- \boxtimes Portfolio 5 Part 4
- □ Portfolio 5 Part 5
- □ Portfolio 5 Part 6
- ☒ Portiono 5 Part 6☒ Portfolio 5 Part 7
- □ Portfolio 5 Part 8
- \square Portfolio 5 Completed

Please accept as submitted and READY to be marked.

UP2036098