# VG100 — Introduction to Engineering

Project 1 Report (Team 6)

#### Rubric

- Game Design (10 pts)
- Code Quality (50 pts)
- Readme (15 pts)
- Personal work (20 pts)

#### 1 Game Design

Not included in this report.

### 2 Code Quality

Your total score of this part is 42/50.

All related information is listed below:

1 point(s) deduction, useless let in, in file View.elm, lines 129-130.

```
list = if model.active > 0 then [ first , second ]
else [ first ]
```

2 point(s) deduction, duplicate code and usage of consinuous if, in file View.elm, lines 149-215.

```
List.map (\ball -> if ball.dx > 8
149
150
                          then renderImage 200 200 "./assets/shadow_right.png"
                              ( ball.x + 200 ) ( ball.y ) 1 (tanBall ball + 180)
151
                          else if ball.dx == 1
152
                          then renderImage 200 200 "./assets/shadow_right.png"
                              ( ball.x + 180 ) ( ball.y - 20 ) 1 (tan
Ball ball + 180)
154
                          else if ball.dx == 2
155
                          then renderImage 200 200 "./assets/shadow_right.png"
156
                              (ball.x + 160) (ball.y - 40) 1 (tanBall ball + 180)
157
                          else if ball.dx == 3
158
                              renderImage 200 200 "./assets/shadow_left.png"
206
                              (ball.x - 32) (ball.y + 13 * ball.dy) 1 (tanBall ball)
207
                          else
208
                              if ball.x > 0
                              then
210
                                 renderImage 200 200 "./assets/shadow_left.png"
211
                                  ( ball.x - 30 * ball.dx ) ( ball.y + 40 * ball.dy ) 1 (tanBall ball)
212
                              else
213
                                 renderImage 200 200 "./assets/shadow_right.png"
214
                                 (ball.x + 200) (ball.y) 1 (tanBall ball + 180)
```

1 point(s) deduction, duplicate code and usage of consinuous if, in file View.elm, lines 312-404.

```
style "color" "#bdc3c7"
312
           , style "font-weight" "300"
313
           , style "line-height" "1"
314
           , style "margin" "30px 00"
315
316
           [text txt]
317
318
     renderNum : Int -> Html Msg
319
     renderNum n =
320
321
395
                    ("", Noop)
396
        in
        button
398
           class "button_choice"
399
           , style "left" "180px"
           , style "background-position-x" "right"
401
           , onClick msg
402
403
404
           [ text str ]
 1 point(s) deduction, duplicate code and usage of consinuous if, in file Subscriptions.elm, lines 35-62.
           "E" ->
 35
              Decode.succeed (EasterEgg "E")
 36
           "X" ->
 37
              Decode.succeed (EasterEgg "X")
              Decode.succeed (EasterEgg "P")
40
           "D" ->
              Decode.succeed (EasterEgg "D")
43
              Decode.succeed (EasterEgg "H")
44
           "O" ->
53
              Decode.succeed (EasterEgg "O")
 55
              Decode.succeed (EasterEgg "N")
           "R" ->
              Decode.succeed (EasterEgg "R")
              Decode.succeed (EasterEgg "A")
60
           "Y" ->
              Decode.succeed (EasterEgg "Y")
62
 1 point(s) deduction, duplicate code and usage of consinuous if, in file Collision.elm, lines 25-48.
           top
Helper = List.filter (\brick -> x >= Tuple.first brick.pos &
& x <= Tuple.first brick.pos + 100
25
                    && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos )
26
27
           botHelper = List.filter (\brick -> x >= Tuple.first brick.pos && x <= Tuple.first brick.pos + 100
```

```
&& y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30)
 30
                                      sideHelperL = List.filter (\brick -> x >= Tuple.first brick.pos - 10 && x <= Tuple.first brick.pos
31
                                                                      && y >= Tuple.second brick.pos && y <= Tuple.second brick.pos + 20 )
33
                                      sideHelperR = List.filter (\brick.-> x >= Tuple.first brick.pos + 100 && x <= Tuple.first brick.pos + 110
 34
                                                                      && y >= Tuple.second brick.pos && y <= Tuple.second brick.pos + 20 )
                                      corner Helper TL = List. filter (\ brick -> x <= Tuple. first \ brick.pos \ \&\& \ x>= Tuple. first \ brick.pos - 10
                                                                      && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos
                                                                      && (x - Tuple.first brick.pos) ^ 2 + ( y - Tuple.second brick.pos ) ^ 2 <= 100)
                                      corner Helper TR = List. filter (\ brick -> x <= Tuple. first brick.pos + 110 \&\& x >= Tuple. first brick.pos + 100 \&\& x >= Tuple. first brick.pos + 100 \&\& x >= Tuple. first brick.pos + 100 &\& x 
                                                                      && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos
41
                                                                      && (x - Tuple.first brick.pos - 100) ^2 + (y - Tuple.second brick.pos) ^2 <= 100)
42
                                      corner Helper LL = List. filter \ (\ brick -> x <= Tuple. first \ brick.pos \ \&\& \ x>= Tuple. first \ brick.pos - 10
                                                                      && y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30
44
                                                                      && (x - Tuple.first brick.pos) ^2 + (y - Tuple.second brick.pos - 20) ^2 <= 100)
45
                                      corner Helper LR = List. filter (\brick -> x <= Tuple. first brick.pos + 110 \&\& x>= Tuple. first brick.pos + 100 \&\& x>= Tuple. first bri
                                                                      && y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30
47
                                                                      && (x - Tuple.first brick.pos - 100) ^2 + (y - Tuple.second brick.pos - 20) ^2 <= 100)
48
 2 point(s) bonus, some documentations found.
```

- 2 point(s) deduction, build and elm-stuff in repo.
- 2 point(s) deduction, useless zip file in repo.

# 3 Readme

Not included in this report.

# 4 Personal work

Not included in this report.