

# 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 44/50.

All related information is listed below:

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

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

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

```
149     List.map (\ball -> if ball.dx > 8
150         then renderImage 200 200 "/assets/shadow_right.png"
151             ( ball.x + 200 ) ( ball.y ) 1 (tanBall ball + 180)
152         else if ball.dx == 1
153         then renderImage 200 200 "/assets/shadow_right.png"
154             ( ball.x + 180 ) ( ball.y - 20 ) 1 (tanBall ball + 180)
155         else if ball.dx == 2
156         then renderImage 200 200 "/assets/shadow_right.png"
157             ( ball.x + 160 ) ( ball.y - 40 ) 1 (tanBall ball + 180)
158         else if ball.dx == 3
159
160     ...
161
206         renderImage 200 200 "/assets/shadow_left.png"
207         ( ball.x - 32 ) ( ball.y + 13 * ball.dy ) 1 (tanBall ball)
208     else
209         if ball.x > 0
210         then
211             renderImage 200 200 "/assets/shadow_left.png"
212             ( ball.x - 30 * ball.dx ) ( ball.y + 40 * ball.dy ) 1 (tanBall ball)
213         else
214             renderImage 200 200 "/assets/shadow_right.png"
215             ( 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.

```

312     [ style "color" "#bdc3c7"
313     , style "font-weight" "300"
314     , style "line-height" "1"
315     , style "margin" "30px 0 0"
316     ]
317     [ text txt ]
318
319 renderNum : Int -> Html Msg
320 renderNum n =
321     div
322
323 ...
324
325
326
327
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394
395     _ ->
396         ("" , Noop)
397
398 in
399 button
400     [ class "button_choice"
401     , style "left" "180px"
402     , style "background-position-x" "right"
403     , onClick msg
404     ]
405     [ text str ]

```

1 point(s) **deduction**, duplicate code and usage of consinuous if, in file [Subscriptions.elm](#), lines 35-62.

```

35     "E" ->
36         Decode.succeed ( EasterEgg "E" )
37
38     "X" ->
39         Decode.succeed ( EasterEgg "X" )
40
41     "P" ->
42         Decode.succeed ( EasterEgg "P" )
43
44     "D" ->
45         Decode.succeed ( EasterEgg "D" )
46
47     "H" ->
48         Decode.succeed ( EasterEgg "H" )
49
50 ...
51
52
53     "O" ->
54         Decode.succeed ( EasterEgg "O" )
55
56     "N" ->
57         Decode.succeed ( EasterEgg "N" )
58
59     "R" ->
60         Decode.succeed ( EasterEgg "R" )
61
62     "A" ->
63         Decode.succeed ( EasterEgg "A" )
64
65     "Y" ->
66         Decode.succeed ( EasterEgg "Y" )
67
68 ...
69
70
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```

1 point(s) **deduction**, duplicate code and usage of consinuous if, in file [Collision.elm](#), lines 25-48.

```

25     topHelper = List.filter (\brick -> x >= Tuple.first brick.pos && x <= Tuple.first brick.pos + 100
26         && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos )
27
28     botHelper = List.filter (\brick -> x >= Tuple.first brick.pos && x <= Tuple.first brick.pos + 100

```

```

29         && y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30)
30
31     sideHelperL = List.filter (\brick -> x >= Tuple.first brick.pos - 10 && x <= Tuple.first brick.pos
32         && y >= Tuple.second brick.pos && y <= Tuple.second brick.pos + 20 )
33
34     sideHelperR = List.filter (\brick -> x >= Tuple.first brick.pos + 100 && x <= Tuple.first brick.pos + 110
35         && y >= Tuple.second brick.pos && y <= Tuple.second brick.pos + 20 )
36
37     cornerHelperTL = List.filter (\brick -> x <= Tuple.first brick.pos && x >= Tuple.first brick.pos - 10
38         && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos
39         && (x - Tuple.first brick.pos) ^ 2 + ( y - Tuple.second brick.pos ) ^ 2 <= 100)
40     cornerHelperTR = List.filter (\brick -> x <= Tuple.first brick.pos + 110 && x >= Tuple.first brick.pos + 100
41         && y >= Tuple.second brick.pos - 10 && y <= Tuple.second brick.pos
42         && (x - Tuple.first brick.pos - 100) ^ 2 + ( y - Tuple.second brick.pos ) ^ 2 <= 100)
43     cornerHelperLL = List.filter (\brick -> x <= Tuple.first brick.pos && x >= Tuple.first brick.pos - 10
44         && y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30
45         && (x - Tuple.first brick.pos) ^ 2 + ( y - Tuple.second brick.pos - 20 ) ^ 2 <= 100)
46     cornerHelperLR = List.filter (\brick -> x <= Tuple.first brick.pos + 110 && x >= Tuple.first brick.pos + 100
47         && y >= Tuple.second brick.pos + 20 && y <= Tuple.second brick.pos + 30
48         && (x - Tuple.first brick.pos - 100 ) ^ 2 + ( y - Tuple.second brick.pos - 20 ) ^ 2 <= 100)

```

2 point(s) **bonus**, some documentations found.

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2 point(s) **deduction**, useless zip file in repo.

### **3 Readme**

Not included in this report.

### **4 Personal work**

Not included in this report.