

# VG100 — Introduction to Engineering

## Project 1 Report (Team 5)

### 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**, duplicate code, in file [Model.elm](#), lines 128-163.

```
128      Object
129      ( toFloat (remainderBy numperrow k) * width, toFloat (k // numperrow) * height )
130      Brick
131      ( width1, height1 )
132      Nothing
133      (Just 1)
134      (Just Good)
135      (Just -20)
136      k
137      0
...
154      Object
155      ( toFloat (remainderBy numperrow k) * width, toFloat (k // numperrow) * height )
156      Brick
157      ( width1, height1 )
158      Nothing
159      (Just 5)
160      (Just Evil)
161      (Just 0)
162      k
163      0
```

1 point(s) **deduction**, duplicate code and usage of if instead of case, in file [Model.elm](#), lines 166-201.

```
166      if remainderBy numperrow evilpos == 0 then
167      concat
168      [ List.map createGoodBrick (List.range 0 (evilpos - 9))
169      , List.map createGuard (List.range (evilpos - 8) (evilpos - 7))
170      , List.map createGoodBrick (List.range (evilpos - 6) (evilpos - 1))
171      , [ createEvil evilpos ]
```

```

172     , [ createGuard (evilpos + 1) ]
173     , List.map createGoodBrick (List.range (evilpos + 2) (evilpos + 7))
174     , List.map createGuard (List.range (evilpos + 8) (evilpos + 9))
175     , List.map createGoodBrick (List.range (evilpos + 9) (numpercolumn * numperrow - 1))

...

192     [ List.map createGoodBrick (List.range 0 (evilpos - 10))
193       , List.map createGuard (List.range (evilpos - 9) (evilpos - 7))
194       , List.map createGoodBrick (List.range (evilpos - 6) (evilpos - 2))
195       , [ createGuard (evilpos - 1) ]
196       , [ createEvil evilpos ]
197       , [ createGuard (evilpos + 1) ]
198       , List.map createGoodBrick (List.range (evilpos + 2) (evilpos + 6))
199       , List.map createGuard (List.range (evilpos + 7) (evilpos + 9))
200       , List.map createGoodBrick (List.range (evilpos + 10) (numpercolumn * numperrow - 1))
201     ]

```

2 point(s) **deduction**, duplicate code (same to the code in Update.elm) and hard coded, in file [Model.elm](#), lines 248-274.

```

248     numberGenerator : Random.Generator Int
249     numberGenerator =
250         Random.uniform 9
251         [ 10
252         , 11
253         , 12
254         , 13
255         , 14
256         , 17
257         , 18

...

265         , 28
266         , 29
267         , 30
268         , 33
269         , 34
270         , 35
271         , 36
272         , 37
273         , 38
274         ]

```

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

2 point(s) **deduction**, build and elm-stuff in repo.

2 point(s) **deduction**, assets files are not in a separate directory.

### **3 Readme**

Not included in this report.

### **4 Personal work**

Not included in this report.