

VG100 — Introduction to Engineering

Project 1 Report (Team 17)

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 28/50.

All related information is listed below:

1 point(s) **deduction**, too many if and else if, should use Type, in file [P1team17.elm](#), lines [162-177](#).

```
162     if ball1.posx<0 then
163         (nxtmodel0 {model|brd=brd1,bal=ball} 3
164         ,Cmd.none
165         )
166     else if ball1.posx>boxp.wid then
167         (nxtmodel0 {model|brd=brd1,bal=ball} 1
168         ,Cmd.none
169         )
170     else if ball1.posy<0 then
171         (nxtmodel0 {model|brd=brd1,bal=ball} 4
172         ,Cmd.none
173         )
174     else if ball1.posy>boxp.hei then
175         (nxtmodel0 {model|brd=brd1,bal=ball} 2
176         ,Cmd.none
177         )
```

1 point(s) **deduction**, should define Type instead of using int, in file [P1team17.elm](#), lines [217-232](#).

```
217     0->({model|sta=1},Cmd.none)
218     1->({model|sta=0},Cmd.none)
219     2->({model|sta=0},Cmd.none)
220     3->
221         (initmodel
222         ,Task.perform MsgGetViewport getViewport
223         )
224     4->
225         (truendmodel
226         ,Task.perform MsgGetViewport getViewport
227         )
228     5->
229         (initmodel
```

```

230         ,Task.perform MsgGetViewport getViewport
231     )
232     _->(model,Cmd.none)

```

1 point(s) **deduction**, duplicate code, in file [P1team17.elm](#), lines 233-248.

```

233 Msgl keysta->
234     ({model|brdmovl=keysta}
235     ,Cmd.none
236     )
237 Msgr keysta->
238     ({model|brdmovr=keysta}
239     ,Cmd.none
240     )
241 Msgu keysta->
242     ({model|brdmovu=keysta}
243     ,Cmd.none
244     )
245 Msgd keysta->
246     ({model|brdmovd=keysta}
247     ,Cmd.none
248     )

```

1 point(s) **deduction**, duplicate code, in file [P1team17.elm](#), lines 249-272.

```

249 Msgrsz wid1 hei1->
250     let
251         windowwid1=(toFloat wid1)
252         windowhei1=(toFloat hei1)
253     in
254     ( {model
255       |windowwid=windowwid1
256       ,windowhei=windowhei1
257       ,sca=Basics.min (windowwid1/viewp.wid) (windowhei1/viewp.hei)
258     }
259     ,Cmd.none
260     )
261 MsgGetViewport viewport->
262     let
263         windowwid1=viewport.viewport.width
264         windowhei1=viewport.viewport.height
265     in
266     ( {model
267       |windowwid=windowwid1
268       ,windowhei=windowhei1
269       ,sca=Basics.min (windowwid1/viewp.wid) (windowhei1/viewp.hei)
270     }
271     ,Cmd.none
272     )

```

1 point(s) **deduction**, too many if and else if, should use Type and function, in file [P1team17.elm](#), lines 389-412.

```

389         if model.sta==5 then
390             div
391                 [Html.Attributes.style "color" "#dfdfdf"
392                 , Html.Attributes.style "font-size" "18px"

```

```

393         ]
394         [ Html.text "The end" ]
395     else if model.curset.index>24 then
396         div
397             [Html.Attributes.style "color" "#34495f"
398             , Html.Attributes.style "font-size" "18px"
399             ]
400             [ Html.text("Dungeon,section"++(String.fromInt(model.curset.index))) ]
401     else if model.curset.index>0 then
402         div
403             [Html.Attributes.style "color" "#34495f"
404             , Html.Attributes.style "font-size" "18px"
405             ]
406             [ Html.text("Island,section"++(String.fromInt(model.curset.index))) ]
407     else
408         div
409             [Html.Attributes.style "color" "#8c0015"
410             , Html.Attributes.style "font-size" "18px"
411             ]
412             [ Html.text "The Void" ]

```

1 point(s) deduction, too long function, in file P1team17.elm, lines 377-457.

```

377 renderPanel model =
378     let
379         statxt=
380             case model.sta of
381                 0->"pause"
382                 1->"resume"
383                 2->"start"
384                 3->"restart"
385                 4->"continue"
386                 5->"return"
387
388     ...
448         , Html.Attributes.style "font-size" "15px"
449         ]
450         [ Html.text ("Use mouse or arrow keys to move the board.") ]
451     , div
452         [ Html.Attributes.style "color" "#7f7f7f"
453         , Html.Attributes.style "font-size" "15px"
454         ]
455         [ Html.text ("Press space to "++statxt++) ]
456     ]
457

```

1 point(s) deduction, too long function, in file P1team17.elm, lines 477-625.

```

477     ,Svg.Attributes.x("0")
478     ,Svg.Attributes.y("0")
479     ,Svg.Attributes.width("")
480     ,Svg.Attributes.height("")
481     ]
482     []
483     brdfig=

```

```

484     image
485     [Svg.Attributes.xlinkHref(brdurl model)
486     ,Svg.Attributes.x(String.toFloat(model.brd.posx))
...
616     ]
617     ,renderPanel model
618     ]
619     ->
620     div
621     []
622     [gamehtml
623     ,renderPanel model
624     ,audio [Html.Attributes.src "res/bgm01.mp3", Html.Attributes.autoplay True, Html.Attributes.loop True][]
625     ]

```

1 point(s) deduction, duplicate code, in file [P1team17.elm](#), lines 581-616.

```

581     [ div
582     [Html.Attributes.style "color" "#dfdfdf"
583     ,Html.Attributes.style "font-size" (String.fromInt(round(model.sca*boxp.wid/8))++"px")
584     ]
585     [Html.text("THE END")]
586     , div
587     [Html.Attributes.style "color" "#dfdfdf"
588     ,Html.Attributes.style "font-size" "18px"
589     ]
590     [Html.text("The unnamable mess of flesh in the void ")]
...
607     [Html.Attributes.style "color" "#dfdfdf"
608     ,Html.Attributes.style "font-size" "18px"
609     ]
610     [Html.text("Don't forget to tell your daughter ")]
611     , div
612     [Html.Attributes.style "color" "#dfdfdf"
613     ,Html.Attributes.style "font-size" "18px"
614     ]
615     [Html.text("a bedtime story.")]
616     ]

```

2 point(s) deduction, duplicate code and hard-coded content, in file [P1team17map.elm](#), lines 6-2358.

```

6  set0=--final_boss
7  {index=0
8  ,scenety=0
9  ,initblk=
10  [{posx=3,posy=0,sta=2,typ=1}
11  ,{posx=10,posy=0,sta=2,typ=1}
12  ,{posx=0,posy=1,sta=2,typ=1}
13  ,{posx=3,posy=1,sta=2,typ=1}
14  ,{posx=4,posy=1,sta=1,typ=7}
15  ,{posx=5,posy=1,sta=1,typ=7}

```

...

```

2349     ,{posx=9,posy=12,sta=8,typ=0}
2350     ,{posx=10,posy=12,sta=8,typ=0}
2351     ,{posx=11,posy=12,sta=8,typ=0}
2352     ,{posx=12,posy=12,sta=8,typ=0}
2353   ]
2354   |>List.map mapblk32
2355   ,nxtu=29
2356   ,nxtl=29
2357   ,nxtl=29
2358   ,nxtr=29

```

1 point(s) **deduction**, should define Type instead of using int, in file [P1team17set.elm](#), lines 99-114.

```

99     1->
100     (model.curset.nxtr
101     ,{bal0|posx=bal0.posx-boxp.wid}
102     )
103     2->
104     (model.curset.nxtl
105     ,{bal0|posy=bal0.posy-boxp.hei}
106     )
107     3->
108     (model.curset.nxtl
109     ,{bal0|posx=bal0.posx+boxp.wid}
110     )
111     4->
112     (model.curset.nxtu
113     ,{bal0|posy=bal0.posy+boxp.hei}
114     )

```

1 point(s) **deduction**, duplicate code, in file [P1team17set.elm](#), lines 145-199.

```

145     , g
146     [Svg.Attributes.id("reuse0")]
147     [ image
148       [Svg.Attributes.xlinkHref("res/wall1.png")
149       ,Svg.Attributes.x("0")
150       ,Svg.Attributes.y("0")
151       ,Svg.Attributes.width("32")
152       ,Svg.Attributes.height("32")
153       ]
154     ]
...
190     [Svg.Attributes.id("reuse4")]
191     [ image
192       [Svg.Attributes.xlinkHref("res/t40.png")-("res/t41.gif")
193       ,Svg.Attributes.x("0")
194       ,Svg.Attributes.y("0")
195       ,Svg.Attributes.width("32")
196       ,Svg.Attributes.height("32")
197       ]
198     ]
199   ]

```

2 point(s) **deduction**, too long function ans duplicate code, in file [P1team17set.elm](#), lines 202-612.

```
202  scenelst=
203  [scene0
204  , defs--1:grassfield
205  []
206  [ g
207    [Svg.Attributes.id("reusebkg")]
208    [ image
209      [Svg.Attributes.xlinkHref("res/bkg1.png")
210      ,Svg.Attributes.x("0")
211      ,Svg.Attributes.y("0")
212
213  ...
214
215  [Svg.Attributes.xlinkHref("res/truend.gif")
216  ,Svg.Attributes.x("0")
217  ,Svg.Attributes.y("0")
218  ,Svg.Attributes.width("32")
219  ,Svg.Attributes.height("32")
220  ]
221  []
222  ]
223  ]
224  ]
```

1 point(s) **deduction**, should define Type instead of using int, in file [P1team17set.elm](#), lines 625-663.

```
625  , {typ=1--box
626    ,reflect=True
627    ,deltsta=-1
628    ,deltbalsta=(\x->zerobalsta)
629    }
630  , {typ=2--monster
631    ,reflect=True
632    ,deltsta=-1
633    ,deltbalsta=(\x->{zerobalsta|health=-10.0,val=25.0})
634    }
635
636  ...
637
638  }
639  , {typ=7--for__boss
640    ,reflect=True
641    ,deltsta=-1
642    ,deltbalsta=(\x->{zerobalsta|health=-200.0})
643    }
644  , {typ=8--unbreakable
645    ,reflect=True
646    ,deltsta=0
647    ,deltbalsta=(\x->zerobalsta)
```

2 point(s) **deduction**, code format is bad.

2 point(s) **deduction**, variable names are bad.

3 point(s) **deduction**, almost all code in two files.

3 Readme

Not included in this report.

4 Personal work

Not included in this report.