

VG100 — Introduction to Engineering

Project 1 Report (Team 10)

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 43/50.

All related information is listed below:

1 point(s) **deduction**, duplicate code, in file [View.elm](#), lines 114-137.

```
114     Treasure ->
115         image [ xlinkHref "https://wx2.sbing.cn/2020/06/19/treasure.png"
116               , x (String.fromInt n)
117               , y (String.fromInt (m - 5))
118               , width (String.fromFloat (bwid + 15))
119               , height (String.fromFloat (bhei + 10))
120               ]
121         []
122     AddBall ->
123         image [ xlinkHref "https://wx1.sbing.cn/2020/06/19/addball.png"
124               , x (String.fromInt n)
125               , y (String.fromInt m)
126               , width (String.fromFloat (bwid - 2))
127               , height (String.fromFloat (bhei - 2))
128               ]
129         []
130     Crazy ->
131         image [ xlinkHref "https://wx2.sbing.cn/2020/06/19/p.png"
132               , x (String.fromInt n)
133               , y (String.fromInt (m - 3))
134               , width (String.fromFloat (bwid + 10))
135               , height (String.fromFloat (bhei + 3))
136               ]
137         []
```

1 point(s) **deduction**, hard coded, in file [View.elm](#), lines 751-781.

```
751     renderInfo1 : Model -> String
752     renderInfo1 model =
753         if model.state == SecondPage then
754             "Some things under certain bricks:"
755         else if model.state == ThirdPage then
```

```

756         " Some things under certain bricks:"
757     else if model.state == FourthPage then
758         " Choose a mode and play!"
759     else
760         ""
761
762     ...
772         " A voice whispers in your ear that the treasure is undoubtedly tempting,"
773     else
774         ""
775
776 renderInfo5 : Model -> String
777 renderInfo5 model =
778     if model.state == Stopped then
779         " but curiosity may also kill the cat..."
780     else
781         ""

```

3 point(s) **deduction**, too long function and code duplicate and too many ++, in file [View.elm](#), lines 880-1318.

```

880 view : Model -> Html Msg
881 view model =
882     svg
883     [ viewBox "0 0 2000 950"
884       , preserveAspectRatio "xMidYMid meet"
885     ]
886     ( renderFilter
887       ++ renderBackground
888       ++ renderBox model
889       ++ renderSpecial model
890
891     ...
1309         , text "/"
1310         , text (String.fromInt (generateClassicLevel (Maybe.withDefault 1 model.classiclevel)).treasureNum)
1311       ]
1312     ]
1313   )
1314   ->
1315   [ text_ [] ]
1316
1317
1318 )

```

2 point(s) **deduction**, too long function and lack of usage of function, in file [Update.elm](#), lines 15-360.

```

15 update : Msg -> Model -> ( Model, Cmd Msg )
16 update msg model =
17     case msg of
18         KeyMsg keyMsg -> --get message from keyboard
19             ( paddleMove 1 { model | pressedKeys = Keyboard.update keyMsg model.pressedKeys }, Cmd.none)
20
21
22         Tock newTime ->
23             ( { model | time = newTime }
24             |> endCountdown

```

...

```
351         )
352     FilterOn ->
353         ( {model | filt = 1}
354         , Cmd.none
355         )
356
357     FilterOff ->
358         ( {model | filt = 0}
359         , Cmd.none
360         )
```

2 point(s) **deduction**, usage of continuous if and duplicate code, in file [Update.elm](#), lines 780-801.

```
780     if determinedTarget.first /= {brick = {bx = 100, by = 600, hp = 3, score = 30, types = Normal }
781         , check = False, directionFirst = -1, directionSecond = 1, check5678 = False, addy = 0, addx = 0} then
782
783         changeBallGrid ball determinedTarget.first.brick determinedTarget.first.directionFirst
784         ↪ determinedTarget.first.directionSecond model
785
786     else if determinedTarget.second /= {brick = {bx = 100, by = 600, hp = 3, score = 30, types = Normal }
787         , check = False, directionFirst = -1, directionSecond = 1, check5678 = True, addy = 0, addx = 150} then
788
789         changeBallGrid ball determinedTarget.second.brick determinedTarget.second.directionFirst
790         ↪ determinedTarget.second.directionSecond model
791
792     else if determinedTarget.third /= {brick = {bx = 100, by = 600, hp = 3, score = 30, types = Normal }
793         , check = False, directionFirst = -1, directionSecond = 1, check5678 = True, addy = 75, addx = 0} then
794
795         changeBallGrid ball determinedTarget.third.brick -determinedTarget.second.directionFirst
796         ↪ -determinedTarget.second.directionSecond model
797
798     else if determinedTarget.fourth /= {brick = {bx = 100, by = 600, hp = 3, score = 30, types = Normal }
799         , check = False, directionFirst = -1, directionSecond = 1, check5678 = True, addy = 75, addx = 0} then
800
801         model
802     else
803         model
```

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

3 Readme

Not included in this report.

4 Personal work

Not included in this report.