VG100 — Introduction to Engineering

Project 1 Report (Team 10)

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.sbimg.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.sbimg.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.sbimg.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              ” ”
```

...

```
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
```

...

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

2 point(s) bonus, some documentations found.

3 Readme

Not included in this report.

4 Personal work

Not included in this report.