

```

1 require 'dxruby'
2 require_relative 'tama'    ###■修正1-(1) 「弾」 クラスのファイルを追加
3 require_relative 'color'
4 require_relative 'window'
5 require_relative 'hero'
6 require_relative 'item'
7
8 def hit?(hero, bomb)
9   diffx = hero.centerx - bomb.centerx
10  diffy = hero.centery - bomb.centery
11  if (diffx > -20) and (diffx < 20) and (diffy > -20) and (diffy < 20)
12    return true
13  else
14    return false
15  end
16 end
17
18 def clicked?(obj)
19   clicked = false
20   if Input.mouse_push?(M_LBUTTON)
21     diffx = Input.mouse_pos_x - obj.centerx
22     diffy = Input.mouse_pos_y - obj.centery
23     if (diffx > -20) and (diffx < 20) and (diffy > -20) and (diffy < 20)
24       clicked = true
25     end
26   end
27   return clicked
28 end
29
30 def game_over(backwindow, hero)
31   backwindow.draw_endback
32   hero.draw
33   Window.update
34   sleep 2
35   exit
36 end
37
38 backwindow=BackWindow.new
39 hero = Hero.new(BackWindow::WINDOW_WIDTH / 2, BackWindow::SKYLINE)
40
41 tamas = []    ###■修正2-(1) 複数の弾を入れるための配列を作る
42
43 bomb1 = Bomb.new
44 bomb2 = Bomb.new
45 bomb3 = Bomb.new
46 apple1 = Apple.new
47 apple2 = Apple.new
48 score = 0
49 click_count = 0
50
51 Window.loop do
52   hero.move
53   bomb1.drop
54   bomb2.drop
55   bomb3.drop
56   apple1.drop
57   apple2.drop
58
59   backwindow.draw
60   hero.draw
61   bomb1.draw
62   bomb2.draw
63   bomb3.draw
64   apple1.draw

```

```

65 | apple2.draw
66 |
67 | if Input.key_push?(K_SPACE)          ###■修正2-(2) スペースキーが押されたら
68 |   tama = Tama.new(hero.centerx, hero.centery)  ###■ Ruby君と同じ位置に弾を作って
69 |   tamas << tama                        ###■ 配列に入れる
70 | end                                   ###■
71 | tamas.each do |tama|                  ###■修正2-(3) 配列に入っている弾の1つ1つについて
72 |   tama.move                          ###■ 弾を動かして
73 |   tama.draw                          ###■ 弾を表示する
74 |   if hit?(tama, bomb1)               ###■修正3-(1) 弾が爆弾1に命中したら
75 |     bomb1.reset                      ###■ 爆弾1を消して
76 |     tamas.delete(tama)               ###■ 弾も消す
77 |   end                                ###■
78 |   if hit?(tama, bomb2)               ###■修正3-(2) 弾が爆弾2に命中したら
79 |     bomb2.reset                      ###■ 爆弾2を消して
80 |     tamas.delete(tama)               ###■ 弾も消す
81 |   end                                ###■
82 |   if hit?(tama, bomb3)               ###■修正3-(3) 弾が爆弾3に命中したら
83 |     bomb3.reset                      ###■ 爆弾3を消して
84 |     tamas.delete(tama)               ###■ 弾も消す
85 |   end                                ###■
86 |   if tama.centery < 0                 ###■修正3-(4) 弾が画面の外まで行ったら
87 |     tamas.delete(tama)               ###■ 弾を消して
88 |   end                                ###■
89 | end                                   ###■
90 |
91 |
92 | if hit?(hero, apple1)
93 |   score = score + apple1.get_score
94 |   apple1.reset
95 | end
96 | if hit?(hero, apple2)
97 |   score = score + apple2.get_score
98 |   apple2.reset
99 | end
100 |
101 | if hit?(hero, bomb1) or hit?(hero, bomb2) or hit?(hero, bomb3)
102 |   game_over(backwindow, hero)
103 | end
104 |
105 | if clicked?(bomb1) or clicked?(bomb2) or clicked?(bomb3)
106 |   game_over(backwindow, hero)
107 | end
108 |
109 | if clicked?(apple1)
110 |   score = score + apple1.get_score
111 |   click_count = click_count + 1
112 |   apple1.reset
113 | end
114 |
115 | if clicked?(apple2)
116 |   score = score + apple2.get_score
117 |   click_count = click_count + 1
118 |   apple2.reset
119 | end
120 |
121 | backwindow.write_char(50, 400, "あなたの得点は#{score}点(クリック#{click_count}回)", Color::WHITE )
122 |
123 | break if Input.key_push?(K_ESCAPE)
124 | end

```