FINAL PROJECT DASAR PEMROGRAMAN
GAME "IRON-BLYAT"
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1. PENGENALAN

"IRON-BLYAT" adalah sebuah game sederhana yang dengan based space shooting game. Setiap pemain harus menembak objek atau musuh yang datang dari lokasi yang random atau acak. Pemain akan kalah jika objek atau musuh melewati garis hijau yang dimana sebagai "pembatas" dari game tersebut. Pemain hanya memiliki satu nyawa atau kesempatan ketika bermain game "IRON-BLYAT".

2. CODE

```c
1    #include<graphics.h>
2    #include<stdio.h>
3    #include<stdlib.h>
4    #include<conio.h>
5    #include<windows.h>
6    #include<time.h>
7    #include<MMsystem.h>
8
9    DWORD maxX = GetSystemMetrics(SM_CXSCREEN);
10   DWORD maxY = GetSystemMetrics(SM_CXSCREEN);
11
12   void Loading ()
13   {
14       setcolor (GREEN);
15       rectangle (150, 349, 1315,405);
16
17       setcolor(LIGHTGRAY);
18       settextstyle (4,0,6);
19       outtextxy (125,50, "LOADING IRON-BLYAT");
20
21       setcolor(LIGHTCYAN);
22       settextstyle (2,0,10);
23       outtextxy (125,500, "MISSION  : PROTECT MOTHERLAND FROM INCOMING F-22 !");
24       outtextxy (125,600, "CONTROL : USE MOUSE TO MOVE, AND LEFT CLICK TO SHOOT THE BULLET");
25       outtextxy (125,700, "GOOD LUCK COMRADE !");
26
27       for(int i=0;i<1160;i+=3) {
28           setcolor (RED);
29           delay(2);
30           rectangle(150+i,350,150+i,404);
31           if(i==1150) {
32               cleardevice();
33               }
34           }
35   }
36
37   void Screen()
38   {
39           setcolor(GREEN);
40           setfillstyle(SOLID_FILL,BLACK);
41           rectangle(0,100,1920,880);
42           floodfill(1,1,GREEN);
43           setcolor(LIGHTGRAY);
44           settextstyle(2,0,10);
45           outtextxy(820,80, "IRON-BLYAT");
46   }
47
48   void PeaShooter (int x, int y, float s, int *a, int *b)
49   {
50       *a=0.5*s+x;
51       *b=3*s+y;
52       //*c=-0.5*s+x;
53       //*d=-3*s+y;
54       setfillstyle(SOLID_FILL,YELLOW);
55       circle(*a,*b,5);
56       floodfill(*a+1,*b+1,YELLOW);
57   }
58
59   void DassaultRafale (int x, int y, float s)
60   {
61       line(0*s+x,-10*s+y,0*s+x,-9*s+y);
62       line(0*s+x,-9*s+y,0.5*s+x,-8*s+y);
63       line(0.5*s+x,-8*s+y,1*s+x,-7*s+y);
64       line(1*s+x,-7*s+y,1*s+x,-6*s+y);
65       line(1*s+x,-6*s+y,2*s+x,-5.5*s+y);
66       line(2*s+x,-5.5*s+y,2*s+x,-4.5*s+y);
67       line(2*s+x,-4.5*s+y,1.5*s+x,-5*s+y);
68       line(1.5*s+x,-5*s+y,1.5*s+x,-4*s+y);
69       line(1.5*s+x,-4*s+y,6*s+x,0*s+y);
70       line(6*s+x,0*s+y,6*s+x,-1.5*s+y);
```

```
71          line(6*s+x,-1.5*s+y,6*s+x,2*s+y);
72          line(6*s+x,2*s+y,2*s+x,3*s+y);
73          line(2*s+x,3*s+y,1.5*s+x,4*s+y);
74          line(1.5*s+x,4*s+y,0*s+x,4*s+y);
75          line(0*s+x,4*s+y,0*s+x,5*s+y);
76          line(0*s+x,5*s+y,0*s+x,3*s+y);
77
78          line(0*s+x,-10*s+y,0*s+x,-9*s+y);
79          line(0*s+x,-9*s+y,-0.5*s+x,-8*s+y);
80          line(-0.5*s+x,-8*s+y,-1*s+x,-7*s+y);
81          line(-1*s+x,-7*s+y,-1*s+x,-6*s+y);
82          line(-1*s+x,-6*s+y,-2*s+x,-5.5*s+y);
83          line(-2*s+x,-5.5*s+y,-2*s+x,-4.5*s+y);
84          line(-2*s+x,-4.5*s+y,-1.5*s+x,-5*s+y);
85          line(-1.5*s+x,-5*s+y,-1.5*s+x,-4*s+y);
86          line(-1.5*s+x,-4*s+y,-6*s+x,0*s+y);
87          line(-6*s+x,0*s+y,-6*s+x,-1.5*s+y);
88          line(-6*s+x,-1.5*s+y,-6*s+x,2*s+y);
89          line(-6*s+x,2*s+y,-2*s+x,3*s+y);
90          line(-2*s+x,3*s+y,-1.5*s+x,4*s+y);
91          line(-1.5*s+x,4*s+y,0*s+x,4*s+y);
92      }
93
94      void F22(int x, int y, float s)
95      {
96
97          line(0*s+x,8*s+y,0.5*s+x,7*s+y);
98          line(0.5*s+x,7*s+y,1*s+x,5*s+y);
99          line(1*s+x,5*s+y,1*s+x,4*s+y);
100         line(1*s+x,4*s+y,1.5*s+x,3*s+y);
101         line(1.5*s+x,3*s+y,1.5*s+x,2*s+y);
102         line(1.5*s+x,2*s+y,4*s+x,-1*s+y);  //SAYAP KANAN
103         line(4*s+x,-1*s+y,4*s+x,-2*s+y);
104         line(4*s+x,-2*s+y,3*s+x,-2.5*s+y);
105         line(3*s+x,-2.5*s+y,1.5*s+x,-3*s+y);
106         line(1.5*s+x,-3*s+y,3*s+x,-4*s+y);
107         line(3*s+x,-4*s+y,3*s+x,-5*s+y);
108         line(3*s+x,-5*s+y,2*s+x,-5.5*s+y);
109         line(2*s+x,-5.5*s+y,1*s+x,-5*s+y);
110         line(1*s+x,-5*s+y,0*s+x,-5*s+y);
111
112         line(0*s+x,8*s+y,-0.5*s+x,7*s+y);
113         line(-0.5*s+x,7*s+y,-1*s+x,5*s+y);
114         line(-1*s+x,5*s+y,-1*s+x,4*s+y);
115         line(-1*s+x,4*s+y,-1.5*s+x,3*s+y);
116         line(-1.5*s+x,3*s+y,-1.5*s+x,2*s+y);
117         line(1*s+x,-3*s+y,1*s+x,-6*s+y);
118         line(0*s+x,7*s+y,0.4*s+x,6.5*s+y);
119         line(0.4*s+x,6.5*s+y,0.5*s+x,5.5*s+y);
120         line(0.5*s+x,5.5*s+y,0*s+x,5*s+y);
121         line(-1.5*s+x,2*s+y,-4*s+x,-1*s+y);   //SAYAP KIRI
122         line(-4*s+x,-1*s+y,-4*s+x,-2*s+y);
123         line(-4*s+x,-2*s+y,-3*s+x,-2.5*s+y);
124         line(-3*s+x,-2.5*s+y,-1.5*s+x,-3*s+y);
125         line(-1.5*s+x,-3*s+y,-3*s+x,-4*s+y);
126         line(-3*s+x,-4*s+y,-3*s+x,-5*s+y);
127         line(-3*s+x,-5*s+y,-2*s+x,-5.5*s+y);
128         line(-2*s+x,-5.5*s+y,-1*s+x,-5*s+y);
129         line(-1*s+x,-5*s+y,0*s+x,-5*s+y);
130         line(-1*s+x,-3*s+y,-1*s+x,-6*s+y);
131         line(0*s+x,7*s+y,-0.4*s+x,6.5*s+y);
132         line(-0.4*s+x,6.5*s+y,-0.5*s+x,5.5*s+y);
133         line(-0.5*s+x,5.5*s+y,0*s+x,5*s+y);
134     }
135
136     int main()
137     {
138
139         int zero=0;
140         int x=900,y=50, scPS=5;
```

```c
141          int xx,yy,i;
142          int f,xp,yp=950;
143          int a, b, c, d, u, z;
144          int page=0;
145          int mv=5;
146          char temp[1];
147          float s=12;
148          f=0;
149        initwindow(maxX,maxX);//Inisialisasi Layar Grafik
150
151        Loading();
152        PlaySound(TEXT("IronBlood.way"),NULL, SND_ASYNC);
153      while (!kbhit())
154
155      {
156              //Set Up Enemy
157              setactivepage(page);
158              setvisualpage(1-page);
159              cleardevice();
160
161              setcolor(LIGHTRED);
162              F22(x,y,s);
163
164              Screen();
165              settextstyle(2,0,10);
166              outtextxy(60,20, "SCORE :");
167              sprintf(temp,"%d",zero);
168              outtextxy(250,20,temp);
169
170              y=y+mv;
171
172              xx=mousex();
173              yy=mousey();
174              setcolor(LIGHTCYAN);
175              DassaultRafale(xx,950,5);
```
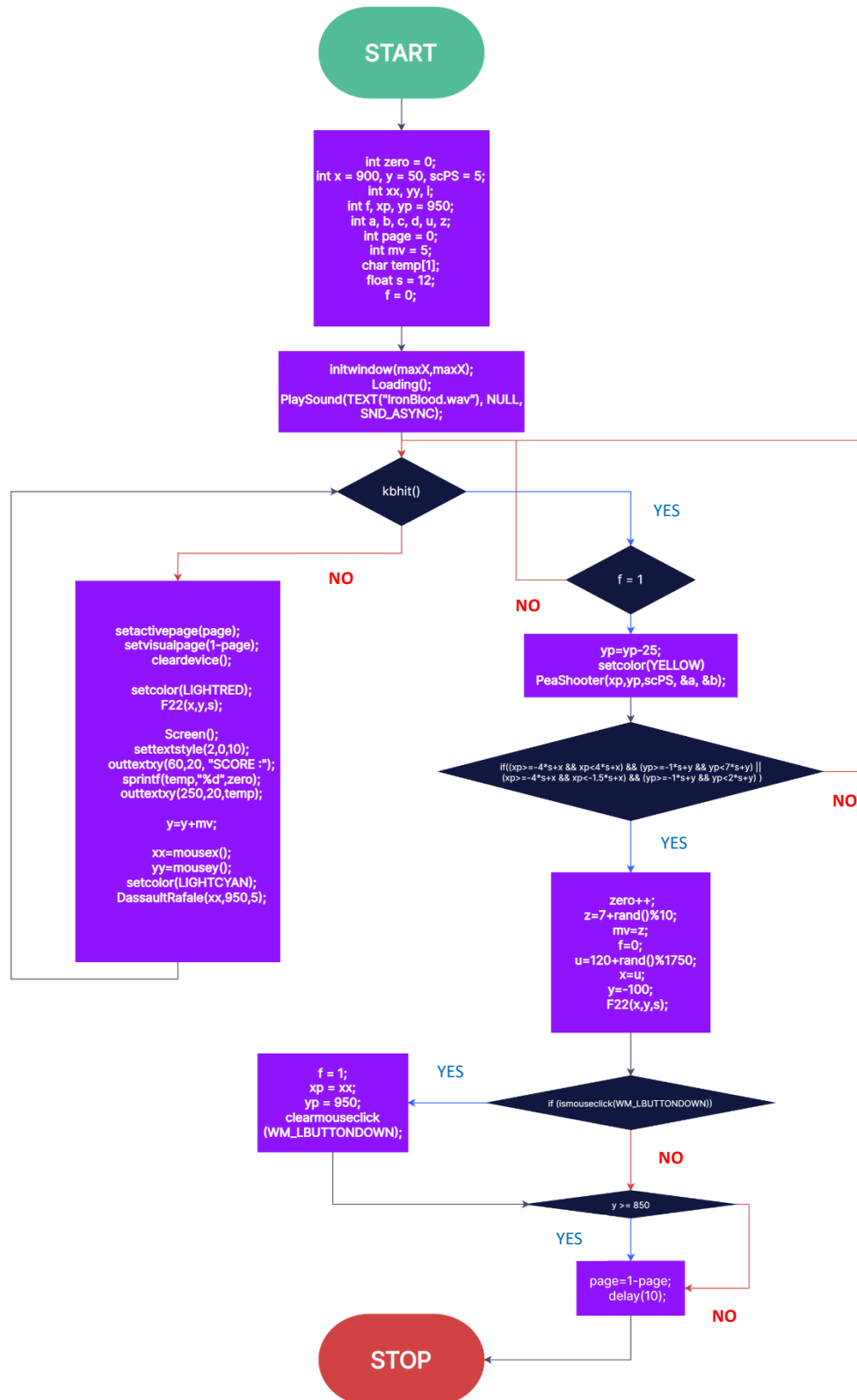
```
176
177              //Tembak Peluru/PeaShooter
178          if (f==1)
179          {
180              yp=yp-25;
181              setcolor(YELLOW);
182              PeaShooter(xp,yp,scPS, &a, &b);
183
184              if((xp>=-4*s+x && xp<4*s+x) && (yp>=-1*s+y && yp<7*s+y) ||
185                 (xp>=-4*s+x && xp<-1.5*s+x) && (yp>=-1*s+y && yp<2*s+y) )
186              {
187                  zero++;
188                  z=7+rand()%10; //Randomizer Movement F22
189                  mv=z;
190                  f=0;
191
192                  u=120+rand()%1750;//Randomizer Location F22
193                  x=u;
194                  y=-100;
195                  F22(x,y,s);
196              }
197          }
198          if (ismouseclick(WM_LBUTTONDOWN))
199          {
200              f=1;
201              xp=xx;
202              yp=950;
203              clearmouseclick(WM_LBUTTONDOWN);
204          }
205
206      if(y>=850)
207          {
208              break;
209          }
210
211
212
213      page=1-page;
214      delay(10);
215      }
216
217  |
218      closegraph();//Menutup Grafik
219  }
220
```

3. FLOWCHART

4. SCREENSHOT GAME