

## Game RPG Text Only

```
D:\DATA\Riko\Dosen\OOP C++\latihan\latihan_10\latihan10.exe

Saya's Status
=====
Level 1
Class : Archer
Gold : 0
Exp : 0/100
Health : 100/100
1. Fight
2. Heal
3. Save
4. Quit
>> _
```

```
1  #include<stdio.h>
2  #include<stdlib.h>
3  #include<string.h>
4  #include<conio.h>
5
6  typedef struct{
7      char name[200];
8      int damage;
9      int maxHealth;
10 }classes;
11
12 typedef struct{
13     char name[200];
14     int damage;
15     int maxHealth;
16     int expGained;
17     int goldGained;
18 }monster;
19
20 int isNew = false;
21 monster monsters[] = {
22     {
23         "Goblin",
24         5,
25         20,
26         10,
27         5
28     },
```

```

29     {
30         "Orc",
31         3,
32         25,
33         12,
34         7
35     }
36     , {
37         "Wizard",
38         10,
39         15,
40         15,
41         10
42     }
43 };
44
45 classes _class[] = {
46     {
47         "Warrior",
48         5,
49         150
50     },
51     {
52         "Rogue",
53         10,
54         75
55     },
56     {
57         "Archer",
58         7,
59         100
60     }
61 };
62
63 typedef struct{
64     char name[200];
65     classes _class;
66     int exp;
67     int level;
68     int gold;
69     int health;
70 }character;
71
72 character playerCharacter;

```

```

63 typedef struct{
64     char name[200];
65     classes _class;
66     int exp;
67     int level;
68     int gold;
69     int health;
70 }character;
71
72 character playerCharacter;
73
74 classes loadClass(char c[]){
75     if(strcmp(c, "Warrior") == 0){
76         playerCharacter._class = _class[0];
77     }
78     else if(strcmp(c, "Rogue") == 0){
79         playerCharacter._class = _class[1];
80     }
81     else{ //Archer
82         playerCharacter._class = _class[2];
83     }
84     return playerCharacter._class;
85 }

```

```

87 void saveAccount(){
88     FILE *fp;
89     fp = fopen("account.txt", "w");
90     fprintf(fp, "%s#%s#%d#%d#%d#%d#",
91         playerCharacter.name,
92         playerCharacter._class.name,
93         playerCharacter.exp,
94         playerCharacter.level,
95         playerCharacter.gold,
96         playerCharacter.health);
97     fclose(fp);
98 }

```

```

100 void loadAccount() {
101     FILE *fp;
102     fp = fopen("account.txt", "r");
103     char tempclass[200];
104
105     if(fp == NULL) {
106         isNew = true;
107         fclose(fp);
108         return;
109     }
110     fscanf(fp, "%[^#]#[^#]#%d#%d#%d#%d#",
111           playerCharacter.name,
112           tempclass,
113           &playerCharacter.exp,
114           &playerCharacter.level,
115           &playerCharacter.gold,
116           &playerCharacter.health);
117     fclose(fp);
118     loadClass(tempclass);
119 }

121 void newGame() {
122     char tempclass[200];
123
124     printf("Input your character's name : ");
125     scanf("%s", playerCharacter.name); getchar();
126
127     do{
128         printf("Choose your class[Warrior|Rogue|Archer] : ");
129         scanf("%s", tempclass); getchar();
130     }while(strcmp(tempclass, "Warrior") == 1 &&
131           strcmp(tempclass, "Rogue") == 1 &&
132           strcmp(tempclass, "Archer") == 1);
133     playerCharacter.exp = 0;
134     playerCharacter.level = 1;
135     playerCharacter.gold = 0;
136
137     playerCharacter.health = loadClass(tempclass).maxHealth;
138 }

```

```

140 void firstMenu(){
141     int input;
142
143     do{
144         printf("1. Start New Game\n");
145         if(!isNew)
146             printf("2. Continue Game\n");
147
148         printf(">> ");
149         scanf("%d", &input); getchar();
150         switch(input){
151             case 1:
152                 newGame();
153                 break;
154         }
155     }while(input > (isNew == true ? 1 : 2) || input < 1);
156 }

```

```

158 void fight(monster m){
159     int input;
160
161     int exp = m.expGained;
162     int gold = m.goldGained;
163     int damage = m.damage;
164     int health = m.maxHealth;
165     char name[200];
166     strcpy(name, m.name);
167
168     do{
169         system("cls");
170         printf("%s\nHealth : %d\nDamage : %d\n\n", name, health, damage);
171         printf("%s\nHealth : %d\nDamage : %d\n\n", playerCharacter.name,
172             playerCharacter.health,
173             playerCharacter._class.damage);
174         printf("1. Attack\n");
175         printf("2. Run\n");
176         printf(">> ");
177
178         scanf("%d", &input); getchar();
179
180         switch(input){
181             case 1:
182                 health -= playerCharacter._class.damage;
183                 if(health <= 0){ //Player win

```

```

184         playerCharacter.gold += gold;
185         playerCharacter.exp += exp;
186         printf("You won!\nYou gained %d gold(s) and %d exp(s)\n", gold, exp);
187         if(playerCharacter.exp >= 100){
188             printf("You've leveled up!\n");
189             playerCharacter.exp -= 100;
190             playerCharacter.level += 1;
191         }
192         printf("Press any key to continue...");
193         getchar();
194         return;
195     }
196     playerCharacter.health -= damage;
197     if(playerCharacter.health <= 0){ //Player lose
198         playerCharacter.gold = 0;
199         playerCharacter.exp = 0;
200         playerCharacter.health = playerCharacter._class.maxHealth;
201         printf("You lose!\nYou lost all your golds and exps\nPress any key to continue...");
202         getchar();
203         return;
204     }
205     break;
206     case 2:
207         printf("You ran away!");
208         getchar();
209         return;
210 }
211 }while(true);

```

```

214 void fightMenu(){
215     int input;
216     do{
217         system("cls");
218         printf("Fight Menu\n=====\n");
219         printf("1. Goblin\n");
220         printf("2. Orc\n");
221         printf("3. Wizard\n");
222         printf("4. Back\n");
223         printf(">> ");
224
225         scanf("%d", &input); getchar();
226
227         switch(input){
228             case 1:
229                 fight(monsters[0]);
230                 break;
231             case 2:
232                 fight(monsters[1]);
233                 break;
234             case 3:
235                 fight(monsters[2]);
236                 break;
237         }
238     }while(input != 4);
239 }

```

```

241 void heal(){
242     int gold = playerCharacter.gold;
243     int healPrice = 20;
244
245     if(playerCharacter.health == playerCharacter._class.maxHealth){
246         printf("You're already at max health!\n");
247     }
248     else if(gold >= healPrice){
249         int input;
250         do{
251             printf("Do you want to heal yourself for %d golds ?\n", healPrice);
252             printf("1. Yes\n2. No\n>> ");
253             scanf("%d", &input); getchar();
254         }while(input != 1 && input != 2);
255
256         if(input == 2){
257             printf("Press any key to continue...");
258             getchar();
259             return;
260         }
261
262         playerCharacter.health = playerCharacter._class.maxHealth;
263         playerCharacter.gold -= healPrice;
264         printf("Healed!!\n");
265     }
266     else
267         printf("You don't have enough gold!\n");
268
269     printf("Press any key to continue...");
270     getchar();
271 }
272
273 int main(){
274
275     loadAccount();
276     int input;
277
278     firstMenu();
279
280     do{
281         system("cls");
282         printf("%s's Status\n=====\n", playerCharacter.name);
283         printf("Level %d\nClass : %s\nGold : %d\nExp : %d/100\nHealth : %d/%d\n",
284             playerCharacter.level,
285             playerCharacter._class.name,
286             playerCharacter.gold, playerCharacter.exp,
287             playerCharacter.health, playerCharacter._class.maxHealth);
288         printf("1. Fight\n");
289         printf("2. Heal\n");
290         printf("3. Save\n");
291         printf("4. Quit\n");
292         printf(">> ");
293
294         scanf("%d", &input); getchar();

```

```
295
296 switch(input){
297     case 1:
298         fightMenu();
299         break;
300     case 2:
301         heal();
302         break;
303     case 3:
304         saveAccount();
305         printf("Saved Successfully!!\nPress any key to continue...");
306         getchar();
307         break;
308 }
309 while(input != 4);
310
311 return 0;
312 }
```