```cpp
1  #include "game.h"
2  #include <iostream>
3  #include <string>
4  using namespace std;
5
6
7      game::game() {
8          //Variables used in game class
9          optionsize = 1;
10         Option1 = "";
11         Option2 = "";
12         Option3 = "";
13         Option4 = "";
14         Option5 = "";
15         Option6 = "";
16         Decision1 = "";
17         Decision2 = "";
18         Decision3 = "";
19         Decision4 = "";
20         Decision5 = "";
21         Decision6 = "";
22         //Keeps track of the number of rounds in the fight function.
23         round = 1;
24         //Is used to track the current room that the player is inside.
25         RoomID = 1;
26
27
28     }
29
30
31     int game::getoptionsize()
32     {
33         return optionsize;
34     }
35     int game::setoptionsize(int theINT)
36     {
37         optionsize = theINT;
38         return optionsize;
39     }
40     int game::setresult(int theINT) {
41         result = theINT;
42         return result;
43     }
44     int game::getresult() {
45         return result;
46     }
47
48     void game::Play()
49     {
50         //This Function starts the game
51         MainMenu();
52     }
53     void game::Clearscreen(void)
```

```cpp
54          {
55              //This function clear the screen of text
56              system("cls");
57          }
58      void game::Exit(void)
59          {
60              //This function closes the game
61              exit(0);
62          }
63      void game::Lineborder(void) {
64              //Creates a horizontal line
65              cout <<
                "=================================================================
                ======================" << endl;
66          }
67      //MenuFunctions
68      void game::MainMenu(void) {
69              //compiles all main menu functions
70              MainMenutext();
71              MainMenuControls();
72
73
74          }
75      void game::MainMenutext(void)
76          {
77              //creates the menu front cover
78              Clearscreen();
79              cout <<
                "-----------------------------------------------------------------
                ------------------------" << endl;
80          cout << "||||||||||            ||           ||||||||||   ||        ||"
                << endl;
81          cout << "||      ||||         ||||          ||       || ||    ||  "
                << endl;
82          cout << "||         ||        || ||         ||        || || ||     "
                << endl;
83          cout << "||         ||       ||   ||        |||||||||   ||||      "
                << endl;
84          cout << "||         ||      ||||||||||      ||      ||  || ||     "
                << endl;
85          cout << "||      ||||     ||        ||      ||      ||  ||   ||   "
                << endl;
86          cout << "||||||||       ||          ||      ||      ||  ||     ||"
                << endl;
87          cout <<
                "-----------------------------------------------------------------
                ------------------------" << endl;
88          cout << "||||||||||   ||||||||||   ||||||||||   ||        ||
                ||||||||||   ||||||||||| ||     |||||||||" << endl;
89          cout << "||          ||        || ||       ||   ||  ||||    ||  ||
                ||          ||          ||               " << endl;
90          cout << "||          ||        || ||       ||   || || ||   ||  ||
                ||          ||          ||          " << endl;
```

```cpp
 91          cout << "||            ||       ||    |||||||||    ||  ||  ||        ⮑
               |||||||     ||||||||||          |||||   " << endl;
 92          cout << "||            ||       ||   ||    ||     ||   || ||   ||    ⮑
               ||    ||            ||  " << endl;
 93          cout << "||            ||       ||   ||      ||    ||    ||||   ||    ⮑
               ||     ||           ||" << endl;
 94          cout << "||||||||||   ||||||||||    ||       ||   ||       ||        ⮑
               ||||||||||   ||      ||        |||||||  " << endl;
 95          cout <<                                                               ⮑
               "----------------------------------------------------------- ⮑
               -------------------------" << endl;
 96          cout <<                                                               ⮑
               "--------------------------------|||||||||||||||||------------- ⮑
               ------------||||||||||||--" << endl;
 97          cout <<                                                               ⮑
               "--------------------------------|||||||||||||||||------------- ⮑
               ------------||||||||||||--" << endl;
 98          cout <<                                                               ⮑
               "|||||||||||---------||||||||----|||||||||||||||----||||||||||| ⮑
               ||||||||||-||||||||||||||||" << endl;
 99          cout << "|||||||||||||-------|||||||||||||---|=|||||||||||          ⮑
               =|-----||||||||||||||||||-||||||||||||||" << endl;
100          cout << "|||||||||||||-------|||||||||||||---|=|||||||||||          ⮑
               =|-----||||||||||||||||||-||||||||||||||" << endl;
101          cout << "|||------|||------|||||||||||||---|=|||[   ]|||            ⮑
               =|-----||||||||||||||||||-||||||||||||||" << endl;
102          cout << "||||     ||||-------|||||||||||||---|=|||[   ]|||           ⮑
               =|-----||||||||||||||||||-||||||    ||||||" << endl;
103          cout << "||||     ||||-------|||||||||||||---|=|||[   ]|||           ⮑
               =|-----||||||||[   ]|||||||-||||||    ||||||" << endl;
104          cout << "----------------------" << endl;
105          cout << "Press 1 to start" << endl;
106          cout << "Press 2 for help" << endl;
107          cout << "Press 3 to exit" << endl;
108
109      }
110      void game::MainMenuControls(void)
111      {
112          //This function allows game to recieve input from the player
113
114
115          cin >> input;
116          if (input == '1')
117          {
118              Clearscreen();
119              cout << "You enter the building. It is as abandoned as the rest ⮑
                   of the world." << endl;
120              Entrance();
121              //PlayerStatsDiplay();
122          }
123          else if (input == '2')
124          {
125              HelpMenu();
```

```cpp
126            }
127            else if (input == '3') {
128                Exit();
129            }
130
131        }
132        //HelpMenu Functions
133        void game::HelpMenu(void) {
134            HelpMenutext();
135            HelpMenuControls();
136        }
137        void game::HelpMenutext(void)
138        {
139            Clearscreen();
140            cout << "Help Menu" << endl;
141            cout << "Controls:" << endl;
142            cout << "To select an option type the number into the console" <<
                 endl;
143            cout << "Press 1 to go back" << endl;
144
145
146        }
147        void game::HelpMenuControls(void)
148        {
149
150
151            char input = '-';
152            cin >> input;
153            if (input == '1')
154            {
155                MainMenu();
156            }
157            else
158            {
159                HelpMenu();
160            }
161
162        }
163        //Game Functions
164        void game::NextRoom(int res, void function1(void), void function2
             (void), void function3(void), void function4(void), void function5
             (void), void function6(void)) {
165            //This function was one of the tests for the pass by function
                 problem
166            if (res == 1) {
167
168            }
169            else if (res == 2) {
170
171            }
172            else if (res == 3) {
173
174            }
```

```cpp
175              else if (res == 4) {
176
177              }
178              else if (res == 5) {
179
180              }
181              else if (res == 6) {
182
183              }
184          }
185      void game::TextDecisionMade(string decision1, string decision2, string ⮡
             decision3, string decision4, string decision5, string decision6, int ⮡
             NumberofOptions) {
186          //This takes player decisons and outputs a result
187          int errors = 1;
188          //An error int was used to make sure if a result was mistyped it    ⮡
                 would reloop.
189          for (int c = 0; c < errors; c++) {
190              int playerinput;
191
192              cout << "Type a number" << endl;
193              cin >> playerinput;
194              if (playerinput == 1 && playerinput <= NumberofOptions) {//This ⮡
                     is the output for the text so where more functions will be   ⮡
                     placed to move to the next room
195                  cout << decision1 << endl;
196                  setresult(1);
197              }
198              else if (playerinput == 2 && playerinput <= NumberofOptions) {
199                  cout << decision2 << endl;
200                  setresult(2);
201              }
202              else if (playerinput == 3 && playerinput <= NumberofOptions) {
203                  cout << decision3 << endl;
204                  setresult(3);
205              }
206              else if (playerinput == 4 && playerinput <= NumberofOptions) {
207                  cout << decision4 << endl;
208                  setresult(4);
209              }
210              else if (playerinput == 5 && playerinput <= NumberofOptions) {
211                  cout << decision5 << endl;
212                  setresult(5);
213              }
214              else if (playerinput == 6 && playerinput <= NumberofOptions) {
215                  cout << decision6 << endl;
216                  setresult(6);
217
218              }
219              else {
220
221                  errors++;
222              }
```

```cpp
223
224            }
225
226        }
227        void game::TextDecision(string option1, string option2, string option3, ⮐
              string option4, string option5, string option6, int NumberofOptions)
228        {
229    //This function is used to display to the player all available options  ⮐
          they can take.
230
231
232
233            if (NumberofOptions >= 1) {
234                cout << "Type 1 to " << option1 << endl;
235                setresult(1);
236            }
237            if (NumberofOptions >= 2) {
238                cout << "Type 2 to " << option2 << endl;
239                setresult(2);
240            }
241            if (NumberofOptions >= 3) {
242                cout << "Type 3 to " << option3 << endl;
243                setresult(3);
244            }
245            if (NumberofOptions >= 4) {
246                cout << "Type 4 to " << option4 << endl;
247                setresult(4);
248            }
249            if (NumberofOptions >= 5) {
250                cout << "Type 5 to " << option5 << endl;
251                setresult(5);
252            }
253            if (NumberofOptions >= 6) {
254                cout << "Type 6 to " << option6 << endl;
255                setresult(6);
256
257            }
258
259
260        }
261
262
263
264        //Rooms in the building
265        void game::Entrance(void) {
266
267
268            RoomID = 1;
269            //  Clearscreen();
270            Lineborder();
271            //The option size is used to makesure that blank options don't get  ⮐
                 used.
272            optionsize = 4;
```

```cpp
273            //Here options and decisions text are inputted for each event.
274            Option1 = "Go to the door on the left";
275            Option2 = "Go to the door on the right";
276            Option3 = "Clear the rubble in front";
277            Option4 = "Move towards the zombie";
278            Option5 = "";
279            Option6 = "";
280            Decision1 = "You enter the door on the left";
281            Decision2 = "You enter the door on the right";
282            Decision3 = "You clear the rubble";
283            Decision4 = "You approach the zombie";
284            Decision5 = "";
285            Decision6 = "";
286
287            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                   optionsize);
288            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                   Decision5, Decision6, optionsize);
289            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                   ApproachZombie, BlankFunction, BlankFunction);
290            //These if statements are used to send the player to the next room
                   which is calculated from the returned result value
291            if (result == 1) {
292
293                LectureRoom();
294            }
295            else if (result == 2) {
296                Hallway3();
297            }
298            else if (result == 3) {
299                Hallway2();
300            }
301            else if (result == 4) {
302
303                fightcalculator();
304            }
305            else if (result == 5) {
306                Entrance();
307            }
308            else if (result == 6) {
309                Entrance();
310            }
311            Lineborder();
312        }
313    void game::Office1(void)
314    {
315            RoomID = 2;
316            //  Clearscreen();
317            Lineborder();
318            optionsize = 4;
319            Option1 = "Check the desk";
320            Option2 = "Open the cupboard";
321            Option3 = "Investigate the hole";
```

```cpp
322            Option4 = "Go Back into the Lecture Room";
323            Option5 = "Salvage the laptop";
324            Option6 = "";
325            Decision1 = "The desk is empty";
326            Decision2 = "Just spiders and cobwebs...";
327            Decision3 = "Looks like someone left a sword down here.";
328            Decision4 = "You leave the office and back out into the entrance";
329            Decision5 = "Dammit! Nothing valuable";
330            Decision6 = "";
331            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                 optionsize);
332            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                 Decision5, Decision6, optionsize);
333            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                 ApproachZombie, BlankFunction, BlankFunction);
334            if (result == 1) {
335                Office1();
336            }
337            else if (result == 2) {
338                Office1();
339            }
340            else if (result == 3) {
341                Addsword();
342                Office1();
343            }
344            else if (result == 4) {
345                LectureRoom();
346            }
347            else if (result == 5) {
348                Office1();
349            }
350            else if (result == 6) {
351                Office1();
352            }
353            Lineborder();
354        }
355    void game::Office2(void)
356        {
357            RoomID = 3;
358            //Clearscreen();
359            Lineborder();
360            optionsize = 4;
361            Option1 = "Check the desk";
362            Option2 = "Open the cupboard";
363            Option3 = "Check the bin";
364            Option4 = "Go back to the Hallway";
365            Option5 = "";
366            Option6 = "";
367            Decision1 = "The desk is empty";
368            Decision2 = "Ahh! There is a body in here.";
369            Decision3 = "Just some empty wrappers...";
370            Decision4 = "You leave the office and back out into the entrance";
371            Decision5 = "";
```

```cpp
372            Decision6 = "";
373            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,  ⮑
                   optionsize);
374            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,  ⮑
                   Decision5, Decision6, optionsize);
375            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,  ⮑
                   ApproachZombie, BlankFunction, BlankFunction);
376            if (result == 1) {
377                Office2();
378            }
379            else if (result == 2) {
380                Office2();
381            }
382            else if (result == 3) {
383                Office2();
384            }
385            else if (result == 4) {
386                Hallway1();
387            }
388            else if (result == 5) {
389                Office2();
390            }
391            else if (result == 6) {
392                Office2();
393            }
394            Lineborder();
395
396        }
397        void game::Office3(void)
398        {
399            RoomID = 4;
400            //Clearscreen();
401            Lineborder();
402            optionsize = 4;
403            Option1 = "";
404            Option2 = "";
405            Option3 = "";
406            Option4 = "";
407            Option5 = "";
408            Option6 = "";
409            Decision1 = "";
410            Decision2 = "";
411            Decision3 = "";
412            Decision4 = "";
413            Decision5 = "";
414            Decision6 = "";
415            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,  ⮑
                   optionsize);
416            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,  ⮑
                   Decision5, Decision6, optionsize);
417            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,  ⮑
                   ApproachZombie, BlankFunction, BlankFunction);
418            if (result == 1) {
```

```cpp
419              Hallway1();
420          }
421          else if (result == 2) {
422              Hallway1();
423          }
424          else if (result == 3) {
425              Hallway1();
426          }
427          else if (result == 4) {
428              Hallway1();
429          }
430          else if (result == 5) {
431              Hallway1();
432          }
433          else if (result == 6) {
434              Hallway1();
435          }
436          Lineborder();
437      }
438      void game::LectureRoom(void)
439      {
440          RoomID = 5;
441          //  Clearscreen();
442          Lineborder();
443          optionsize = 4;
444          Option1 = "Check the Office";
445          Option2 = "Go back into the entrance";
446          Option3 = "Investigate the hole";
447          Option4 = "Go into the Hallway";
448          Option5 = "Salvage the laptop";
449          Option6 = "";
450          Decision1 = "You enter the office";
451          Decision2 = "You enter the hallway again";
452          Decision3 = "Jeeze that stinks";
453          Decision4 = "You enter into the hallway";
454          Decision5 = "You gain 2 electronic parts";
455          Decision6 = "";
456          TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,  ⏎
                  optionsize);
457          TextDecisionMade(Decision1, Decision2, Decision3, Decision4,  ⏎
                  Decision5, Decision6, optionsize);
458          //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,  ⏎
                  ApproachZombie, BlankFunction, BlankFunction);
459          if (result == 1) {
460              Office1();
461          }
462          else if (result == 2) {
463              Entrance();
464          }
465          else if (result == 3) {
466              LectureRoom();
467          }
468          else if (result == 4) {
```

```cpp
469                  Hallway1();
470              }
471          else if (result == 5) {
472                  LectureRoom();
473              }
474          else if (result == 6) {
475                  LectureRoom();
476              }
477              Lineborder();
478          }
479      void game::Hallway1(void)
480      {
481          RoomID = 6;
482          //Clearscreen();
483          Lineborder();
484          optionsize = 6;
485          Option1 = "Bust open the door on the left";
486          Option2 = "Try lifting the metal beam";
487          Option3 = "Use the bathroom";
488          Option4 = "Investigate the strange lights down the hall";
489          Option5 = "You hear a noise...";
490          Option6 = "Continue down the hallway";
491          Decision1 = "You enter an office.";
492          Decision2 = "Grrr... No use it won't budge.";
493          Decision3 = "You cautiously enter the bathroom.";
494          Decision4 = "You enter the the server room.";
495          Decision5 = "You enter the storage room.";
496          Decision6 = "You open the doors at the end and discover another
                  hallway.";
497          TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                  optionsize);
498          TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                  Decision5, Decision6, optionsize);
499          //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                  ApproachZombie, BlankFunction, BlankFunction);
500          if (result == 1) {
501                  Office2();
502          }
503          else if (result == 2) {
504                  Hallway1();
505          }
506          else if (result == 3) {
507                  Toilet();
508          }
509          else if (result == 4) {
510                  ServerRoom();
511          }
512          else if (result == 5) {
513                  StorageRoom();
514          }
515          else if (result == 6) {
516                  Hallway2();
517          }
```

```cpp
518            Lineborder();
519        }
520    void game::Toilet(void)
521        {
522            RoomID = 7;
523            //  Clearscreen();
524            Lineborder();
525            optionsize = 4;
526            Option1 = "Check the toilet";
527            Option2 = "Open the drug cabinet";
528            Option3 = "Go back into the hallway";
529            Option4 = "You hear chewing in the toilet";
530            Option5 = "";
531            Option6 = "";
532            Decision1 = "The desk is empty";
533            Decision2 = "Ahh! There is a body in here.";
534            Decision3 = "Looks like someone left a baseball bat up here.";
535            Decision4 = "You leave the office and back out into the entrance.";
536            Decision5 = "You gain 2 electronic parts.";
537            Decision6 = "";
538            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,  ⮠
                optionsize);
539            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,        ⮠
                Decision5, Decision6, optionsize);
540            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,        ⮠
                ApproachZombie, BlankFunction, BlankFunction);
541            if (result == 1) {

543            }
544            else if (result == 2) {

546            }
547            else if (result == 3) {
548                Hallway1();
549            }
550            else if (result == 4) {

552            }
553            else if (result == 5) {

555            }
556            else if (result == 6) {

558            }
559            Lineborder();
560        }
561    void game::ServerRoom(void)
562        {
563            RoomID = 8;
564            //Clearscreen();
565            Lineborder();
566            optionsize = 4;
567            Option1 = "Sneak up to the Zombie.";
```

```cpp
568             Option2 = "Check the body next to the desk.";
569             Option3 = "Inspect the server console.";
570             Option4 = "Go Back into the Hallway";
571             Option5 = "Salvage the laptop";
572             Option6 = "";
573             Decision1 = "The desk is empty";
574             Decision2 = "You find a bandage, Oh the irony.";
575             Decision3 = "This is beyond my understanding.";
576             Decision4 = "You leave the server room and back out into the
                    hallway.";
577             Decision5 = "You gain 2 electronic parts.";
578             Decision6 = "";
579             TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                    optionsize);
580             TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                    Decision5, Decision6, optionsize);
581             //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                    ApproachZombie, BlankFunction, BlankFunction);
582             if (result == 1) {
583                 fightcalculator();
584             }
585             else if (result == 2) {
586                 ServerRoom();
587             }
588             else if (result == 3) {
589                 ServerRoom();
590             }
591             else if (result == 4) {
592                 Hallway1();
593             }
594             else if (result == 5) {
595                 ServerRoom();
596             }
597             else if (result == 6) {
598                 ServerRoom();
599             }
600             Lineborder();
601         }
602     void game::StorageRoom(void)
603     {
604             RoomID = 9;
605             //Clearscreen();
606             Lineborder();
607             optionsize = 4;
608             Option1 = "Check the desk";
609             Option2 = "Open the cupboard";
610             Option3 = "Investigate the hole in the ceiling.";
611             Option4 = "Go Back into the entrance";
612             Option5 = "That zombie in the corner 'looks' dead.";
613             Option6 = "";
614             Decision1 = "The desk is empty";
615             Decision2 = "This broom might help me.";
616             Decision3 = "Something big must have brought this down.";
```

```cpp
617            Decision4 = "You leave the storage room and go back to the
                   hallway.";
618            Decision5 = "Ahh its alive!!!";
619            Decision6 = "";
620            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                   optionsize);
621            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                   Decision5, Decision6, optionsize);
622            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                   ApproachZombie, BlankFunction, BlankFunction);
623            if (result == 1) {
624                StorageRoom();
625            }
626            else if (result == 2) {
627                StorageRoom();
628            }
629            else if (result == 3) {
630                StorageRoom();
631            }
632            else if (result == 4) {
633                Hallway1();
634            }
635            else if (result == 5) {
636                fightcalculator();
637
638            }
639            else if (result == 6) {
640                StorageRoom();
641            }
642            Lineborder();
643        }
644    void game::Hallway2(void)
645    {
646        RoomID = 10;
647        //  Clearscreen();
648        Lineborder();
649        optionsize = 4;
650        Option1 = "See if the elevator works...";
651        Option2 = "Check the canteen";
652        Option3 = "Go back down the Hallway";
653        Option4 = "Clear the rubble you saw on the way in.";
654        Option5 = "";
655        Option6 = "";
656        Decision1 = "Close but no cigar...";
657        Decision2 = "You enter the canteen.";
658        Decision3 = "You open the door and go down the hallway.";
659        Decision4 = "You leave the office and back out into the entrance";
660        Decision5 = "";
661        Decision6 = "";
662        TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                   optionsize);
663        TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                   Decision5, Decision6, optionsize);
```

```cpp
664            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                   ApproachZombie, BlankFunction, BlankFunction);
665            if (result == 1) {
666                Hallway2();
667            }
668            else if (result == 2) {
669                Canteen();
670            }
671            else if (result == 3) {
672                Hallway1();
673            }
674            else if (result == 4) {
675                Entrance();
676            }
677            else if (result == 5) {
678                Hallway2();
679            }
680            else if (result == 6) {
681                Hallway2();
682            }
683            Lineborder();
684        }
685     void game::Elevator(void)
686     {
687            RoomID = 11;
688            //  Clearscreen();
689            Lineborder();
690            optionsize = 4;
691            Option1 = "Check the desk";
692            Option2 = "Open the cupboard";
693            Option3 = "Investigate the hole";
694            Option4 = "Go Back into the hallway";
695            Option5 = "Salvage the laptop";
696            Option6 = "";
697            Decision1 = "The desk is empty";
698            Decision2 = "Ahh! There is a body in here.";
699            Decision3 = "Looks like someone left a baseball bat up here.";
700            Decision4 = "You leave the office and back out into the entrance";
701            Decision5 = "You gain 2 electronic parts";
702            Decision6 = "";
703            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                   optionsize);
704            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                   Decision5, Decision6, optionsize);
705            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                   ApproachZombie, BlankFunction, BlankFunction);
706            if (result == 1) {

708            }
709            else if (result == 2) {

711            }
712            else if (result == 3) {
```

```cpp
713
714             }
715         else if (result == 4) {
716             Hallway2();
717         }
718         else if (result == 5) {
719
720         }
721         else if (result == 6) {
722
723         }
724         Lineborder();
725     }
726     void game::Kitchen(void)
727     {
728         RoomID = 12;
729         //  Clearscreen();
730         Lineborder();
731         optionsize = 4;
732         Option1 = "Check the oven";
733         Option2 = "Open the fridge";
734         Option3 = "Attack the zombie";
735         Option4 = "Go Back into the canteen";
736         Option5 = "";
737         Option6 = "";
738         Decision1 = "That's bit charred.";
739         Decision2 = "Is that a...Head.";
740         Decision3 = "Looks like someone left a baseball bat up here.";
741         Decision4 = "You leave the kitchen and back out into the canteen";
742         Decision5 = "";
743         Decision6 = "";
744         TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                optionsize);
745         TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                Decision5, Decision6, optionsize);
746         //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                ApproachZombie, BlankFunction, BlankFunction);
747         if (result == 1) {
748             Kitchen();
749         }
750         else if (result == 2) {
751             Kitchen();
752         }
753         else if (result == 3) {
754             fightcalculator();
755
756         }
757         else if (result == 4) {
758             Canteen();
759         }
760         else if (result == 5) {
761             Kitchen();
762         }
```

```cpp
763              else if (result == 6) {
764                  Kitchen();
765              }
766              Lineborder();
767          }
768      void game::Canteen(void)
769      {
770          RoomID = 13;
771          //Clearscreen();
772          Lineborder();
773          optionsize = 4;
774          Option1 = "Attack the Zombie in the corner";
775          Option2 = "Check the dinner tray";
776          Option3 = "Go into the kitchen";
777          Option4 = "Go Back into the hallway";
778          Option5 = "";
779          Option6 = "";
780          Decision1 = "You attack the zombie.";
781          Decision2 = "Picked clean.";
782          Decision3 = "You enter the kitchen";
783          Decision4 = "You leave the canteen and back out into the entrance";
784          Decision5 = "";
785          Decision6 = "";
786          TextDecision(Option1, Option2, Option3, Option4, Option5, Option6, ⏎
                 optionsize);
787          TextDecisionMade(Decision1, Decision2, Decision3, Decision4, ⏎
                 Decision5, Decision6, optionsize);
788          //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom, ⏎
                 ApproachZombie, BlankFunction, BlankFunction);
789          if (result == 1) {
790              fightcalculator();
791          }
792          else if (result == 2) {
793              Canteen();
794          }
795          else if (result == 3) {
796              Kitchen();
797          }
798          else if (result == 4) {
799              Hallway2();
800          }
801          else if (result == 5) {
802              Canteen();
803          }
804          else if (result == 6) {
805              Canteen();
806          }
807          Lineborder();
808      }
809      void game::Hallway3(void) {
810          RoomID = 14;
811          //  Clearscreen();
812          Lineborder();
```

```
813            optionsize = 4;
814            Option1 = "Open the door on the left";
815            Option2 = "Go upstairs";
816            Option3 = "Rush the zombie.";
817            Option4 = "Go Back into the entrance";
818            Option5 = "";
819            Option6 = "";
820            Decision1 = "Looks like the office was being cleared out.";
821            Decision2 = "You ascend the stairs.";
822            Decision3 = "You charge the zombie.";
823            Decision4 = "You leave the hallway and back out into the entrance";
824            Decision5 = "";
825            Decision6 = "";
826            TextDecision(Option1, Option2, Option3, Option4, Option5, Option6, ⮡
                  optionsize);
827            TextDecisionMade(Decision1, Decision2, Decision3, Decision4,       ⮡
                  Decision5, Decision6, optionsize);
828            //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,       ⮡
                  ApproachZombie, BlankFunction, BlankFunction);
829            if (result == 1) {
830                Hallway3();
831            }
832            else if (result == 2) {
833                //Staircase();
834                cout << "Level 2 Reached" << endl;
835                End();
836            }
837            else if (result == 3) {
838                fightcalculator();
839
840            }
841            else if (result == 4) {
842                Entrance();
843            }
844            else if (result == 5) {
845                Hallway3();
846            }
847            else if (result == 6) {
848                Hallway3();
849            }
850            Lineborder();
851        }
852    void game::Office4(void)
853    {
854            RoomID = 15;
855            //Clearscreen();
856            Lineborder();
857            optionsize = 4;
858            Option1 = "Check the desk";
859            Option2 = "Open the cupboard";
860            Option3 = "Investigate the hole";
861            Option4 = "Go Back into the entrance";
862            Option5 = "Salvage the laptop";
```

```cpp
863              Option6 = "";
864              Decision1 = "The desk is empty";
865              Decision2 = "Ahh! There is a body in here.";
866              Decision3 = "Looks like someone left a baseball bat up here.";
867              Decision4 = "You leave the office and back out into the entrance";
868              Decision5 = "You gain 2 electronic parts";
869              Decision6 = "";
870              TextDecision(Option1, Option2, Option3, Option4, Option5, Option6, ⮑
                     optionsize);
871              TextDecisionMade(Decision1, Decision2, Decision3, Decision4, ⮑
                     Decision5, Decision6, optionsize);
872              //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom, ⮑
                     ApproachZombie, BlankFunction, BlankFunction);
873              if (result == 1) {
874
875              }
876              else if (result == 2) {
877
878              }
879              else if (result == 3) {
880
881              }
882              else if (result == 4) {
883
884              }
885              else if (result == 5) {
886
887              }
888              else if (result == 6) {
889
890              }
891              Lineborder();
892          }
893      void game::JanitorRoom(void)
894      {
895              RoomID = 16;
896              //  Clearscreen();
897              Lineborder();
898              optionsize = 4;
899              Option1 = "Go back to the office";
900              Option2 = "Open the cupboard";
901              Option3 = "Investigate the hole";
902              Option4 = "Go Back into the entrance";
903              Option5 = "Salvage the laptop";
904              Option6 = "";
905              Decision1 = "The desk is empty";
906              Decision2 = "Ahh! There is a body in here.";
907              Decision3 = "Looks like someone left a baseball bat up here.";
908              Decision4 = "You leave the office and back out into the entrance";
909              Decision5 = "You gain 2 electronic parts";
910              Decision6 = "";
911              TextDecision(Option1, Option2, Option3, Option4, Option5, Option6, ⮑
                     optionsize);
```

```cpp
912             TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                    Decision5, Decision6, optionsize);
913             //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                    ApproachZombie, BlankFunction, BlankFunction);
914             if (result == 1) {
915                 Office4();
916             }
917             else if (result == 2) {
918
919             }
920             else if (result == 3) {
921
922             }
923             else if (result == 4) {
924
925             }
926             else if (result == 5) {
927
928             }
929             else if (result == 6) {
930
931             }
932             Lineborder();
933         }
934     void game::Staircase(void)
935     {
936             RoomID = 17;
937             //  Clearscreen();
938             Lineborder();
939             optionsize = 4;
940             Option1 = "Check the desk";
941             Option2 = "Open the cupboard";
942             Option3 = "Investigate the hole";
943             Option4 = "Go Back into the entrance";
944             Option5 = "Salvage the laptop";
945             Option6 = "";
946             Decision1 = "The desk is empty";
947             Decision2 = "Ahh! There is a body in here.";
948             Decision3 = "Looks like someone left a baseball bat up here.";
949             Decision4 = "You leave the office and back out into the entrance";
950             Decision5 = "You gain 2 electronic parts";
951             Decision6 = "";
952             TextDecision(Option1, Option2, Option3, Option4, Option5, Option6,
                    optionsize);
953             TextDecisionMade(Decision1, Decision2, Decision3, Decision4,
                    Decision5, Decision6, optionsize);
954             //NextRoom(result, OfficeSmall, OfficeLarge, ConferenceRoom,
                    ApproachZombie, BlankFunction, BlankFunction);
955             if (result == 1) {
956
957             }
958             else if (result == 2) {
959
```

```
960                }
961            else if (result == 3) {
962
963            }
964            else if (result == 4) {
965
966            }
967            else if (result == 5) {
968
969            }
970            else if (result == 6) {
971
972            }
973            Lineborder();
974        }
975
976    void game::fightcalculator(void) {
977        //These functions automatically add serveral weapons to the player
                inventory
978        Addhand();
979        Addclub();
980        Addfryingpan();
981
982        cout << "You are attacked by a zombie" << endl;
983        //This if statement calculates the fight sequence and checks player
                and zombie health
984        while (playerhealth || ZombieAIhealth > 0) {
985            cout << "Round " << round << endl;
986            RandomAttackZombie();
987            cout << "Type 1 to attack" << endl;
988            cout << "Type 2 to block" << endl;
989            cout << "Type 3 use an item from inventory" << endl;
990            cin >> input;
991
992
993            if (input == '1') {
994                //Here player damage action is calculated
995                ZombieAIhealth = ZombieAIhealth - playerweapondamage;
996                playerhealth = playerhealth - ZombieAIweapondamage;
997                cout << "player health:" << playerhealth << endl;
998                cout << "Zombie health:" << ZombieAIhealth << endl;
999
1000               if (playerhealth <= 0) {
1001                   cout << "Your dead" << endl;
1002                   End();
1003               }
1004               else if (ZombieAIhealth <= 0) {
1005                   cout << "Nice the zombie is dead" << endl;
1006                   PlayerHealthReset();
1007                   ZombieHealthReset();
1008                   RoomIDchecker();
1009               }
1010           }
```

```cpp
            else if (input == '2') {
                //Here player block action is calculated
                cout << "player health:" << playerhealth << endl;
                cout << "Zombie health:" << ZombieAIhealth << endl;
                playerhealth = playerhealth - ZombieAIweapondamage / 4;
                playerhealth = playerhealth - ZombieAIweapondamage;

                if (playerhealth <= 0) {
                    cout << "Your dead" << endl;
                    End();
                }
                else if (ZombieAIhealth <= 0) {
                    cout << "Nice the zombie is dead" << endl;
                    PlayerHealthReset();
                    RoomIDchecker();
                }
            }
            else if (input == '3') {
                //This option allows the player to change weapons
                ChangeItem();
            }

            round++;
        }

        ZombieAIweapondamage = ZombieAIweapondamagebase;
    }

    void game::RoomIDchecker(void) {
        //This switch statement is sed to check which room the player is in
        switch (RoomID) {

        case 1:
            Entrance();
            break;
        case 2:
            Office1();
            break;
        case 3:
            Office2();
            break;
        case 4:
            Office3();
            break;
        case 5:
            LectureRoom();
            break;
        case 6:
            Hallway1();
            break;
        case 7:
            Toilet();
            break;
```

```cpp
1064            case 8:
1065                ServerRoom();
1066                break;
1067            case 9:
1068                StorageRoom();
1069                break;
1070            case 10:
1071                Hallway2();
1072                break;
1073            case 11:
1074                Elevator();
1075                break;
1076            case 12:
1077                Kitchen();
1078                break;
1079            case 13:
1080                Canteen();
1081                break;
1082            case 14:
1083                Hallway3();
1084                break;
1085            case 15:
1086                Office4();
1087                break;
1088            case 16:
1089                JanitorRoom();
1090                break;
1091            case 17:
1092                Staircase();
1093                break;
1094            }

1096        }

1098        void game::RandomAttackZombie(void) {
1099            //This calculates the zombie attack damage which is randomized
1100            int zombieattackline = random(1, 5);
1101            //Zombie may attack with several choices for damage
1102            switch (zombieattackline) {
1103            case 1:
1104                cout << "Zombie hits you with a frying pan" << endl;
1105                ZombieAIweapondamage = fryingpandamage;
1106                break;
1107            case 2:
1108                cout << "Zombie smacks you in the jaw" << endl;
1109                ZombieAIweapondamage = handdamage;
1110                break;
1111            case 3:
1112                cout << "Zombie tries to bite you're hand" << endl;
1113                ZombieAIweapondamage = handdamage;
1114                break;
1115            case 4:
1116                cout << "Zombie swings its arm" << endl;
```

```cpp
1117                    ZombieAIweapondamage = handdamage;
1118                    break;
1119            case 5:
1120                    cout << "Zombie hits you with a club" << endl;
1121                    ZombieAIweapondamage = clubdamage;
1122                    break;
1123            }
1124        }
1125
1126
1127    void game::End(void) {
1128        //This ends the game and sends the player to the menu
1129        cout << "Press 1 to continue:" << endl;
1130        cin >> input;
1131        if (input == '1')
1132        {
1133            MainMenu();
1134        }
1135        else {
1136            End();
1137        }
1138    }
1139
```