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Text Adventure Game



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1. Introduction

We were asked to design and implement an application as a project, so we chose to create a text adventure game which is written in java programming language. The user is tasked with escaping from a labyrinth by finding keys and collecting items. While the goal is to escape, points are earned by collecting “treasures” throughout the game that will increase their score.. The user has two choices either fight or flee both options can have deadly consequences! If the user chooses to fight the monster, they may face a grizzly end. Escape is possible if your fast enough, but you won’t discover as much treasure. The user can find items to help along their journey, the items can rejuvenate health and add additional lives. One of the items being keys to open the locked doors and another being hidden treasure which increases the score. The user will be able to save and load game, the user will also be able to save the high score.

1.1 Restrictions

The game has some rules that the user must follow. In order to successfully get to the end the player must not let their health or lives be depleted.

The user is not always going to have the advantage when playing the game, as every new player has to choose between three characters each of which have different statistics that can affect gameplay dramatically. The items will be dropped randomly based on a percentage chance and will be based on rarity with items like treasure being the least rare and usable items being more rare.

Our program also uses no Java FX or any graphics for its interface. While this is to expect as the program is a simple word game, it might not satisfy most modern users.



2. Requirements

Table 1 below lists all the requirements for this project. The time estimated (EMH) and time spent on a task (AMH) is measured in man hours. The prio column lists the priorities where Prio 1 is highest priority and Prio 10 is lowest priority.

Table 1 - Requirements

Req. No	Req. Name	Req. Description	EM H	AMH	Prio
1	MVC Architecture	Build MVC Architecture within java project	2	3 DONE	1
2	Start Menu	Create start menu with for beginning the game and choosing character	2	1.5 DONE	2
3	Normal game menu	Create game menu for use while within the labyrinth (not encounters)	3	4 DONE	3
4	Implement character class	Add character variables and attributes to character class	1	1.5 DONE	4
5	Implement hero subclass	Add hero variables and attributes to hero subclass	1.5	2 DONE	5
6	Implement monster subclass	Add monster variables and attributes to monster subclass	0.5	0.5 DONE	6



7	Design Map Outside Java	Create an outline for the map using pen and paper. Place doors and objects within etc.	0.5	1 DONE	7
8	Fill Room Class	Fill room class with appropriate variables	0.5	0.5 DONE	8
9	Implement Designed Map	Within java framework implement the map in the	2	3+ ongoing	9
10	Create initial story elements	Create a story element including goal and necessary info	0.5	1 DONE	10
11	Add Monsters	Create the various possible monsters to encounter	2		11
12	Map navigation	Navigate the map by taking the commands in the normal game menu	2		12
13	Encounter Menu	Add encounter menu with inputs and reactions from players	3		13
14	Printable map screen	Map screen that shows location and where you've been	2		14
15	Death Menu	To give options for what to do upon	1.5		15
16	Treasure Score	Track treasure pickup and list score at end of game	2		16



17	High Score	Ability to check highest score	4		17
18	Additional Flavor Text	Add more flavor text for entering rooms, attacks and finish other placeholders	4		18
19	Save game function	Add ability to save and quit	3		19
20	Implement Item Functions	Add functionality to items	4		20
21	Key and Doors	Implement doors and keys to function within game	4		21
22	Level System	Use exp value from monsters to increase level providing health benefits etc.	2		22
23	Boss Fight	Add final boss for end game finish	2		23
24	End Screen Menu Win	Add a screen for when you win	1		24
25	Difficulty System	Modify existing enemies and player health etc to create easier/more difficult fights	4		25



3. Design and Implementation

3.1 Model Package

The model package holds the data of the objects, the objects are instantiated in the main and then connected to the view and then to the controller.

3.1.1 Character Class Model

The character class is the super class of the hero class and the monster class.

A screenshot of an IDE window showing the source code for 'Character.java'. The file is located at 'C:\Users\ DELL\IdeaProjects\theTextAdventure\src\project1E7\Model\Character.java'. The code defines a 'Character' class with protected attributes for health, strength, speed, description, and name. It includes a constructor and getter/setter methods for each attribute. The IDE interface includes a menu bar, a toolbar, a project explorer on the left, and a status bar at the bottom showing the current line (3:14), encoding (CRLF), and other settings.

```
1 package project1E7.Model;
2
3 public class Character {
4     protected int health;
5     protected int strength;
6     protected int speed;
7     protected String description;
8     protected String name;
9
10    public Character(int health, int strength, int speed, String description, String name) {
11        this.health = health;
12        this.strength = strength;
13        this.speed = speed;
14        this.description = description;
15        this.name = name;
16    }
17
18    public int getHealth() { return health; }
19
20    public void setHealth(int health) { this.health = health; }
21
22    public int getStrength() { return strength; }
23
24    public void setStrength(int strength) { this.strength = strength; }
25
26    public int getSpeed() { return speed; }
27
28    public void setSpeed(int speed) { this.speed = speed; }
29
30 }
31
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40
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```




3.1.2 Hero Class Model

The hero class inherits from the character class has association with main class with aggregation from both item class and key class.

```
1 public class Hero extends Character {
2     private int endurance;
3     private Key[] keyRing;
4     private ArrayList<Item> backpack;
5     private int lives;
6     private int currentTreasure;
7     private boolean alive;
8     public Hero(int health, int strength, int speed, String description, String name, int endurance) {
9         super(health, strength, speed, description, name);
10        this.endurance = endurance;
11        lives = 5;
12        currentTreasure = 0;
13        alive = true;
14    }
15
16    public Key[] getKeyRing() { return keyRing; }
17
18    public void setKeyRing(Key[] keyRing) { this.keyRing = keyRing; }
19
20    public ArrayList<Item> getBackpack() { return backpack; }
21
22    public void setBackpack(ArrayList<Item> backpack) { this.backpack = backpack; }
23
24    public int getEndurance() { return endurance; }
25
26    public int getLives() { return lives; }
27
28    public void setLives(int lives) { this.lives = lives; }
29 }
```

3.1.3 Monster Class Model

The monster class inherits from the character class with aggregation from item class and association with room class.

```
1 package project1E7.Model;
2
3 public class Monster extends Character {
4     private Item item;
5     private boolean alive;
6     private int xp;
7
8     public Monster(int health, int strength, int speed, String description, String name, Item item, boolean alive, int xp) {
9         super(health, strength, speed, description, name);
10        this.item = item;
11        this.alive = alive;
12        this.xp = xp;
13    }
14
15    public Item getItem() { return item; }
16
17    public void setItem(Item item) { this.item = item; }
18
19    public boolean isAlive() { return alive; }
20
21    public void setAlive(boolean alive) { this.alive = alive; }
22
23    public int getXp() { return xp; }
24 }
25
```



3.1.4 Item Class Model

The item class is the super class for key class, treasure class, heart class, healthpotion class, and coffee class. It has an association with room class aggregation with both monsters and players.

A screenshot of the IntelliJ IDEA IDE showing the source code for the Item class. The file is named Item.java and is located in the package project1E7.Model. The code defines a public class Item with a private String attribute named name. It includes a constructor Item(String name) that initializes the name attribute and a getter method getName() that returns the name. The IDE interface shows the project structure on the left, the code editor in the center, and the status bar at the bottom indicating the file is named 'Item'.

3.1.5 Key Class Model

The key class inherits from the item class and has an aggregation with the hero class.

A screenshot of the IntelliJ IDEA IDE showing the source code for the Key class. The file is named Key.java and is located in the package project1E7.Model. The code defines a public class Key that extends the Item class. It includes a constructor Key(String name) that calls the super constructor super(name). The IDE interface shows the project structure on the left, the code editor in the center, and the status bar at the bottom indicating the file is named 'Key'.



3.1.6 Heart Class Model

The heart class inherits from the item class.

A screenshot of the IntelliJ IDEA IDE. The main editor window displays the code for Heart.java. The code is as follows:

```
1 package project1E7.Model;
2
3 public class Heart extends Item {
4     private int extraLife;
5
6     public Heart(String name) {
7         super(name);
8         extraLife = 1;
9     }
10
11     public int getExtraLife() { return extraLife; }
12
13 }
14
15
16
```

The left sidebar shows the project structure with 'Heart' selected under 'Model'. The bottom status bar indicates the file is 'Unnamed', the encoding is 'UTF-8', and the line length is '1:26'. The system tray at the bottom shows the date and time as '8:25 PM 12/4/2019'.

3.1.7 HealthPotion Class Model

The healthpotion class inherits from the item class.

A screenshot of the IntelliJ IDEA IDE. The main editor window displays the code for HealthPotion.java. The code is as follows:

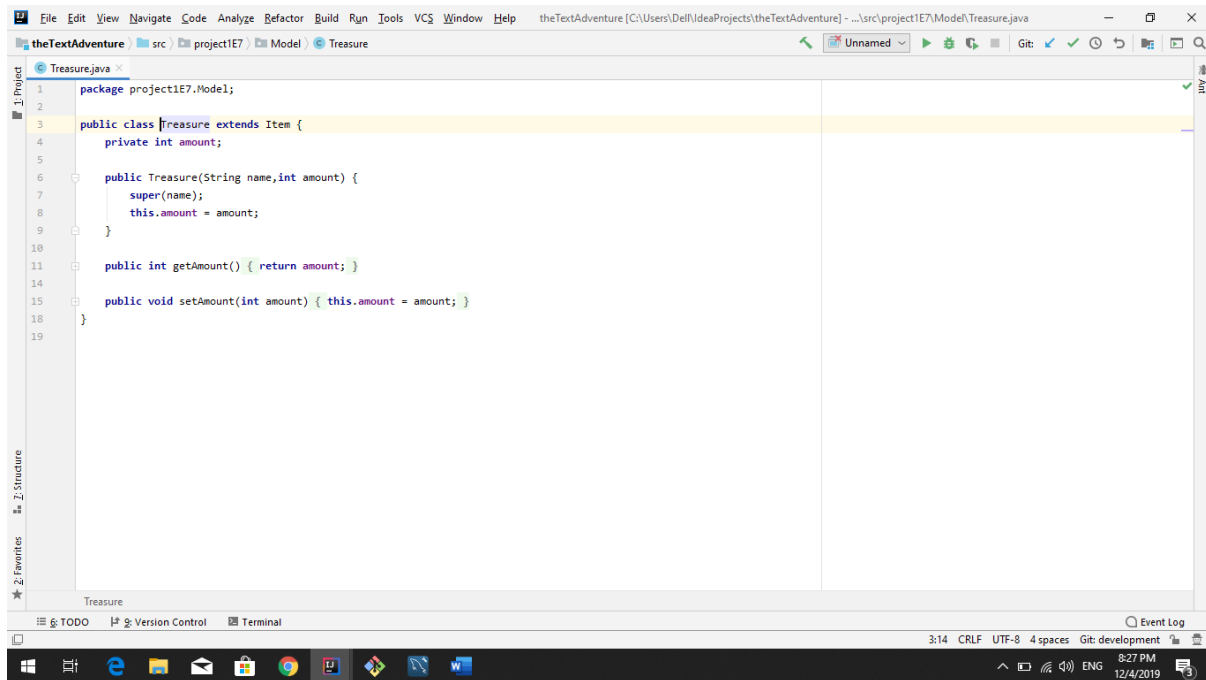
```
1 package project1E7.Model;
2
3 public class HealthPotion extends Item {
4     private Integer addHealth;
5
6     public HealthPotion(String name) {
7         super(name);
8         addHealth = 60;
9     }
10
11     public Integer getAddHealth() { return addHealth; }
12
13 }
14
15
```

The left sidebar shows the project structure with 'HealthPotion' selected under 'Model'. The bottom status bar indicates the file is 'Unnamed', the encoding is 'UTF-8', and the line length is '3:14'. The system tray at the bottom shows the date and time as '8:25 PM 12/4/2019'.



3.1.8 Treasure Class Model

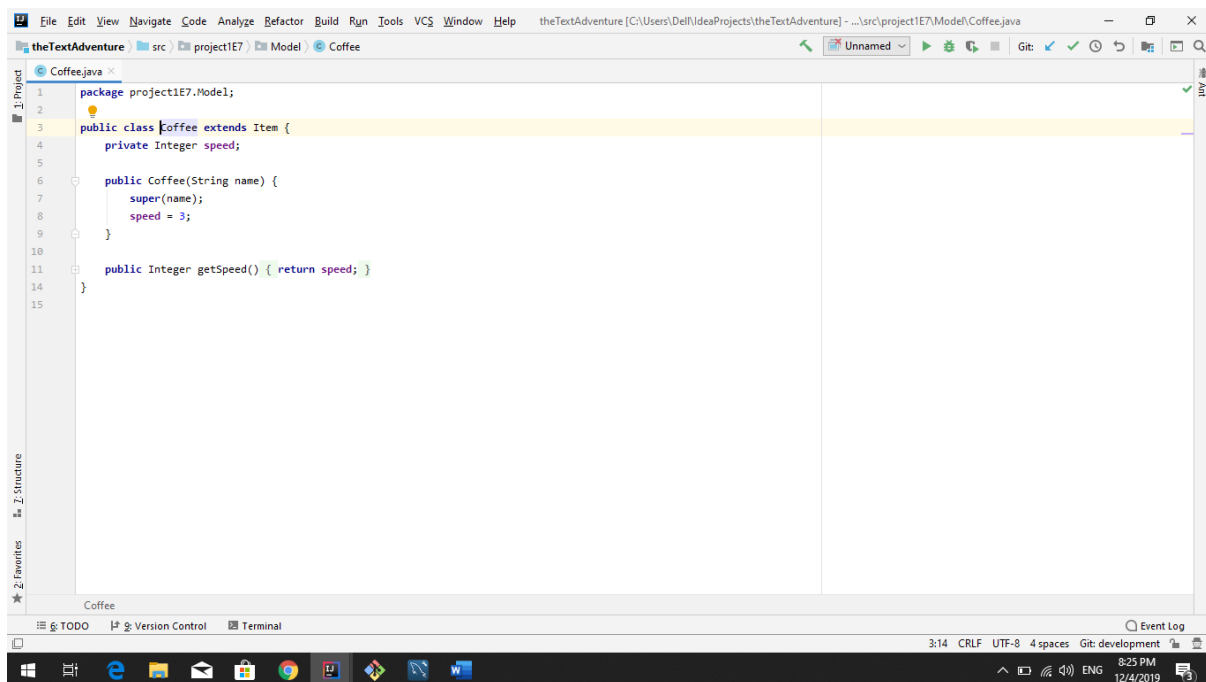
The treasure class inherits from the item class.



```
1 package project1E7.Model;
2
3 public class Treasure extends Item {
4     private int amount;
5
6     public Treasure(String name,int amount) {
7         super(name);
8         this.amount = amount;
9     }
10
11     public int getAmount() { return amount; }
12
13     public void setAmount(int amount) { this.amount = amount; }
14 }
15
```

3.1.9 Coffee Class Model

The coffee class inherits from the item class.



```
1 package project1E7.Model;
2
3 public class Coffee extends Item {
4     private Integer speed;
5
6     public Coffee(String name) {
7         super(name);
8         speed = 3;
9     }
10
11     public Integer getSpeed() { return speed; }
12 }
13
```



3.1.10 Room Class Model

The room class has an association with both item class and monster class, it also has an aggregation with door class and composition with main class.

```
1 public class Room {
2     private String description;
3     private Item item;
4     private boolean hasMonster;
5     private boolean found;
6     private Monster monster;
7     private boolean hasItem = false;
8
9     public Room(String description, Item item, boolean hasMonster, boolean found, Monster monster, boolean hasItem) {
10         this.description = description;
11         this.item = item;
12         this.hasMonster = hasMonster;
13         this.found = found;
14         this.monster = monster;
15         this.hasItem = hasItem;
16     }
17
18     public String getDescription() { return description; }
19
20     public Item getItem() { return item; }
21
22     public void setDescription(String description) { this.description = description; }
23
24     public void setItem(Item item) { this.item = item; }
25
26     public boolean isMonster() { return hasMonster; }
27
28     public void setMonster(boolean monster) { this.hasMonster = monster; }
29 }
```

3.1.11 Door Class Model

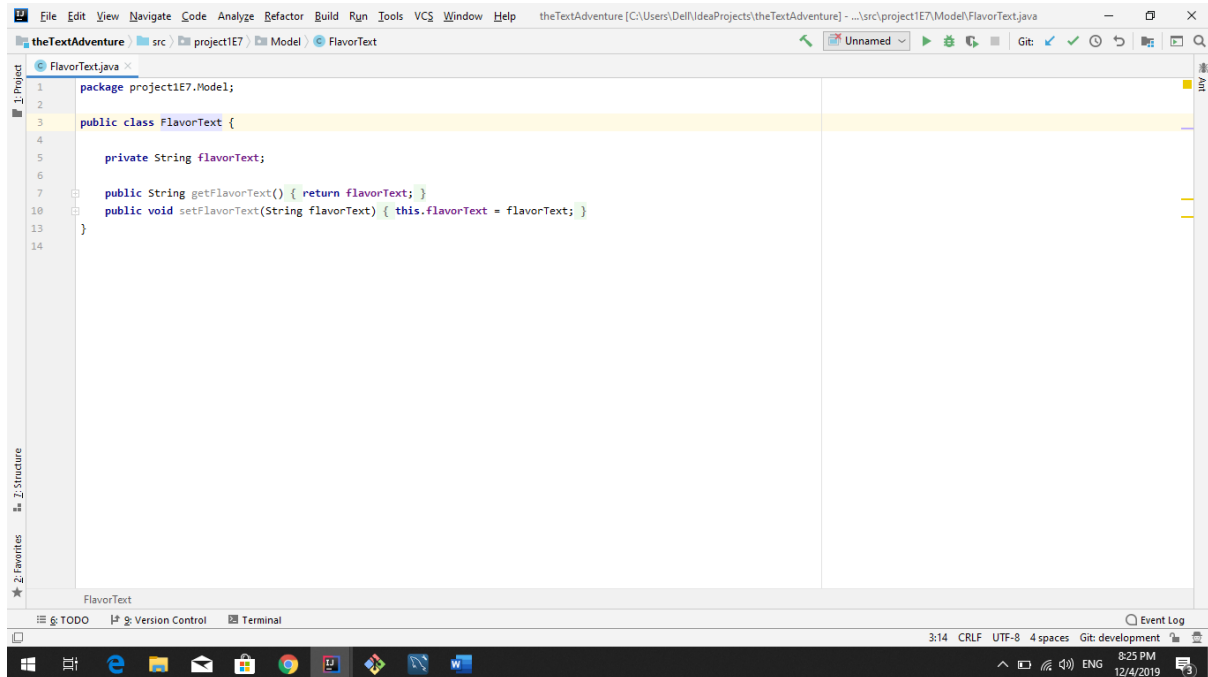
The door class has an aggregation with the room class.

```
1 package project1E7.Model;
2
3 public class Door {
4     private boolean lock;
5     private String nameOfKey;
6     private String description;
7
8     public Door(boolean lock, String nameOfKey, String description) {
9         this.lock = lock;
10        this.nameOfKey = nameOfKey;
11        this.description = description;
12    }
13
14    public boolean isUnlocked() { return lock; }
15
16    public String getNameOfKey() { return nameOfKey; }
17
18    public String getDescription() { return description; }
19 }
```



3.1.11 FlavorText Class Model

The FlavorText is a temporary class anything done in here will be moved once we figure out where everything will go.

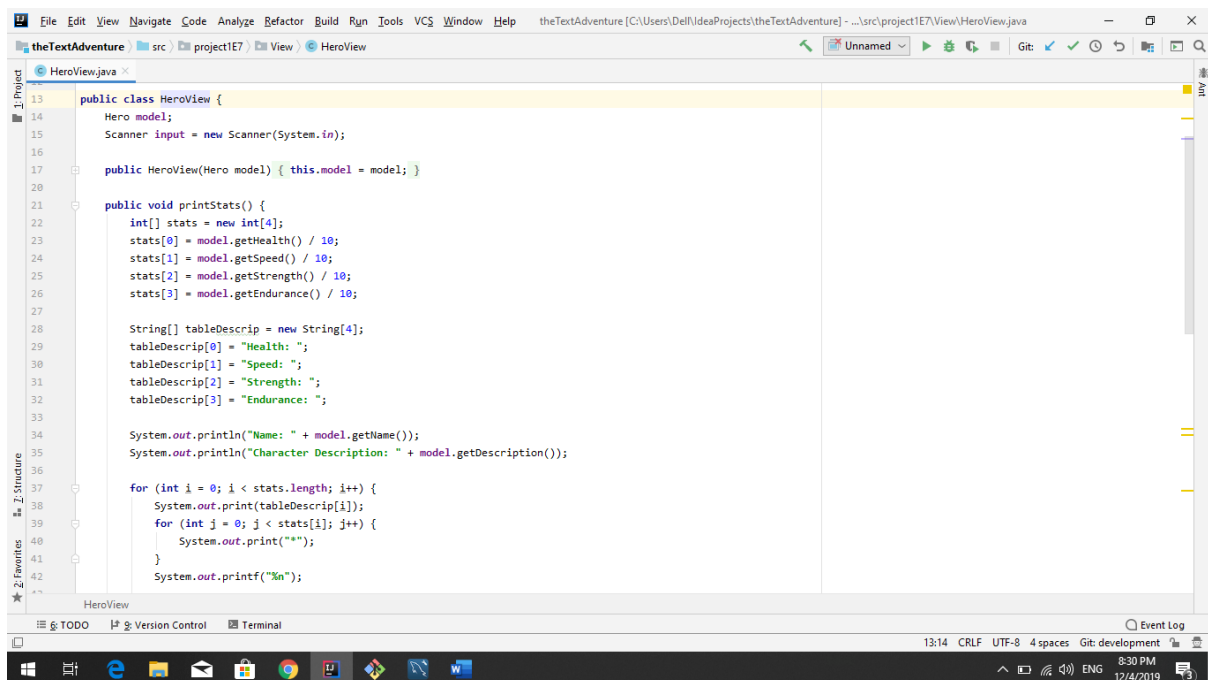


```
1 package project1E7.Model;
2
3 public class FlavorText {
4
5     private String flavorText;
6
7     public String getFlavorText() { return flavorText; }
8
9     public void setFlavorText(String flavorText) { this.flavorText = flavorText; }
10
11 }
12
13
14
```

3.2 View Package

The view package is what will eventually hold everything that will be printed out to the screen for the user to see sent from the location related to what will be printed takes the model as a parameter.

3.2.1 HeroView Class



```
13 public class HeroView {
14     Hero model;
15     Scanner input = new Scanner(System.in);
16
17     public HeroView(Hero model) { this.model = model; }
18
19     public void printStats() {
20         int[] stats = new int[4];
21         stats[0] = model.getHealth() / 10;
22         stats[1] = model.getSpeed() / 10;
23         stats[2] = model.getStrength() / 10;
24         stats[3] = model.getEndurance() / 10;
25
26         String[] tableDescrip = new String[4];
27         tableDescrip[0] = "Health: ";
28         tableDescrip[1] = "Speed: ";
29         tableDescrip[2] = "Strength: ";
30         tableDescrip[3] = "Endurance: ";
31
32         System.out.println("Name: " + model.getName());
33         System.out.println("Character Description: " + model.getDescription());
34
35         for (int i = 0; i < stats.length; i++) {
36             System.out.print(tableDescrip[i]);
37             for (int j = 0; j < stats[i]; j++) {
38                 System.out.print(" ");
39             }
40             System.out.printf("%n");
41         }
42     }
43 }
44
```



3.2.2 MonsterView Class

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help theTextAdventure [C:\Users\De\IdeaProjects\theTextAdventure] - ...src\project1E7\View\MonsterView.java
theTextAdventure src project1E7 View MonsterView
MonsterView.java
1 package project1E7.View;
2
3 import project1E7.Model.Monster;
4
5 public class MonsterView {
6     Monster model;
7
8     public MonsterView(Monster model) { this.model = model; }
9
10
11
12     public void printStatus(Monster monster) {
13         System.out.println("Enemy Type: " + model.getDescription());
14         if (model.isAlive() == true) {
15             System.out.println("Health: " + model.getHealth());
16         }
17         else {
18             System.out.println("The " + monster + "has been defeated at your hands...");
19         }
20     }
21
22     public void encounterMenu() {
23         System.out.printf("\nYou have encountered a %s !\n", model.getDescription() +
24             "What is your next move?\n" +
25             "To fight enter '1'\n" +
26             "To flee enter '2'\n" +
27             "To use one of your item enter '3'\n");
28     }
29 }
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```



3.2.4 RoomView Class

```
1 package project1E7.View;
2
3
4 import ...
5
6
7
8 public class RoomView {
9     Room model;
10
11     public RoomView(Room model) { this.model = model; }
12
13
14
15     public boolean roomHasItem(Room room) {
16         if (model.isHasItem() == true) {
17             return true;
18         } else {
19             return false;
20         }
21     }
22 }
```

3.2.5 DoorView Class

```
1 package project1E7.View;
2
3 import project1E7.Model.Door;
4
5 public class DoorView {
6     Door model;
7
8     public DoorView(Door model) { this.model = model; }
9
10
11
12 }
```




3.2.6 KeyView Class

This class may be leaving.

```
1 package project1E7.View;
2
3 import project1E7.Model.Key;
4
5 public class KeyView {
6     Key model;
7
8     public KeyView(Key model) { this.model = model; }
9
10 }
11
12
```

3.3 Controller Package

The controller package holds the logic operations of the game to the respective classes the controller takes the model and the view as a parameter when created, the controller carries out the the methods and logic of the model.

3.3.1 HeroController Class

```
13 package project1E7.Controller;
14 import project1E7.Model.Hero;
15 import project1E7.View.HeroView;
16 import project1E7.Model.MonsterController;
17
18 public class HeroController {
19     Hero model;
20     HeroView view;
21     private Coffee coffee;
22     private HealthPotion healthPotion;
23     private Heart heart;
24     private Treasure treasure;
25
26     public HeroController(Hero model, HeroView view) {
27         this.model = model;
28         this.view = view;
29     }
30
31     public boolean attack(MonsterController monster) {
32         if (model.getEndurance() < 10) {
33             return false;
34         }
35
36         Random rand = new Random();
37
38         int chanceToHit = rand.nextInt( bound: 101);
39         if (chanceToHit <= 50) {
40             return false;
41         }
42
43         model.setEndurance(model.getEndurance() - 10);
44     }
45
46     HeroController() moveHero()
47 }
48
```



3.3.2 MonsterController Class

```
1 package project1E7.Controller;
2
3 import ...
4
5
6
7
8 public class MonsterController {
9     Monster model;
10    MonsterView view;
11
12    public MonsterController(Monster model, MonsterView view) {
13        this.model = model;
14        this.view = view;
15    }
16
17    public void takeDamage(int incDamage) {
18
19        if (incDamage > model.getHealth()) {
20            model.setAlive(false);
21        } else
22            model.setHealth(model.getHealth() - incDamage);
23    }
24
25
26    public boolean attack(HeroController hero) {
27
28        int damageDone;
29        Random rand = new Random();
30
31        int chanceToHit = rand.nextInt( bound: 100);
32    }
33 }
```

3.3.3 RoomController Class

```
1 public class RoomController {
2     Room model;
3     RoomView view;
4     private Treasure treasure;
5     private Coffee coffee;
6     private HealthPotion healthPotion;
7     private Heart heart;
8
9     public RoomController(Room model, RoomView view) {
10        this.model = model;
11        this.view = view;
12    }
13
14    public boolean roomHasMonster() {
15        Random rand = new Random();
16
17        int chanceForMonster = rand.nextInt( bound: 100);
18
19        if (model.isMonster() == false) {
20            if (chanceForMonster >= 50) {
21                return false;
22            } else
23                model.setMonster(true);
24            return true;
25        }
26    }
27
28    public Monster getMonster(Room room) {
29        Monster monster = model.getMonster();
30    }
31 }
```



3.3.4 ItemController Class

```
theTextAdventure [C:\Users\Del\IdeaProjects\theTextAdventure] - ...src\project1E7\Controller\ItemController.java
ItemController.java
1 package project1E7.Controller;
2
3 import ...
4
5
6
7
8 public class ItemController {
9     Item model;
10    ItemView view;
11    private Treasure treasure;
12    private Coffee coffee;
13    private HealthPotion healthPotion;
14    private Heart heart;
15
16    public ItemController(Item model, ItemView view) {
17        this.model = model;
18        this.view = view;
19    }
20
21 }
```

3.3.5 DoorController Class

```
theTextAdventure [C:\Users\Del\IdeaProjects\theTextAdventure] - ...src\project1E7\Controller\DoorController.java
DoorController.java
1 package project1E7.Controller;
2
3 import ...
4
5
6 public class DoorController {
7     Door model;
8     DoorView view;
9
10    public DoorController(Door model, DoorView view) {
11        this.model = model;
12        this.view = view;
13    }
14
15 }
```



3.3.6 KeyController Class

May be leaving this class behind.

```
1 package project1E7.Controller;
2
3 import ...
4
5
6 public class KeyController {
7     Key model;
8     KeyView view;
9
10    public KeyController(Key model, KeyView view) {
11        this.model = model;
12        this.view = view;
13    }
14 }
15
```

3.3.6 FlavorTextController Class

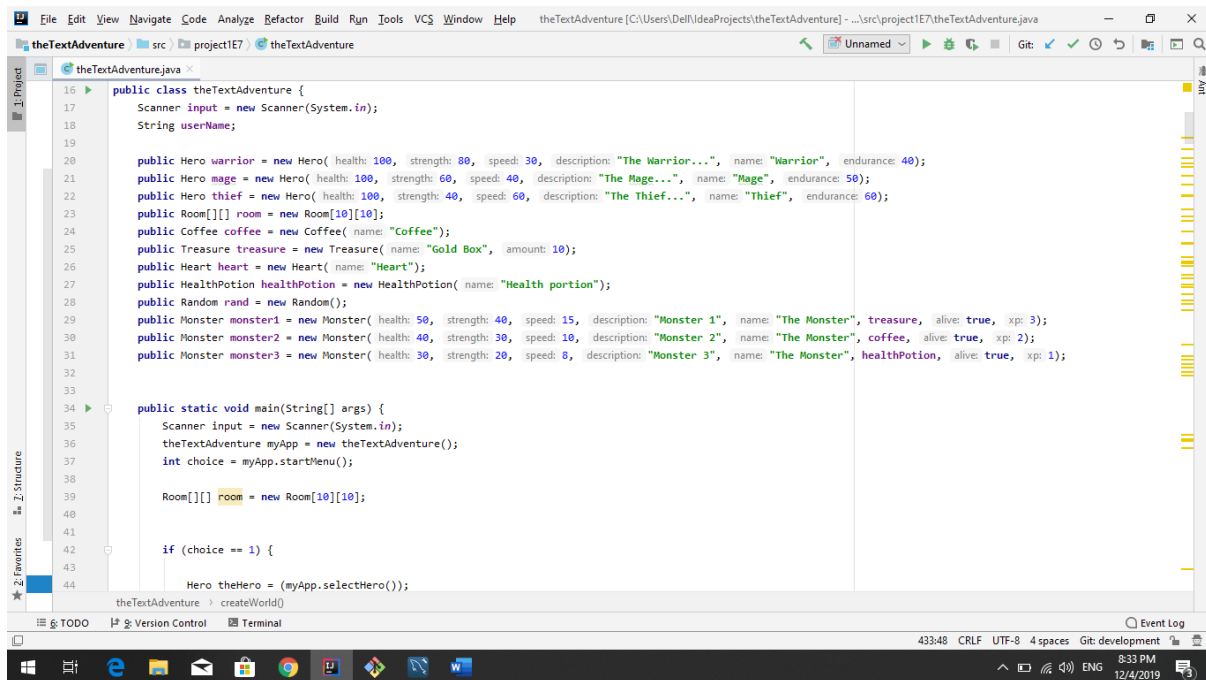
This is a temporary class and will be leaving to the respective view classes.

```
5 public class FlavorTextController {
6
7     private String introFlavorText;
8
9     private String helpText;
10
11    private String weaponWarrior;
12    private String weaponThief;
13
14    private String roomFlavorText1;
15    private String roomFlavorText2;
16    private String roomFlavorText3;
17    private String roomFlavorText4;
18    private String roomFlavorText5;
19
20    private String encounterFlavorTextSpiderling1;
21    private String encounterFlavorTextSpiderling2;
22    private String encounterFlavorTextBat1;
23    private String encounterFlavorTextBat2;
24    private String encounterFlavorTextSlime1;
25    private String encounterFlavorTextSlime2;
26    private String encounterFlavorTextSkeleton1;
27    private String encounterFlavorTextSkeleton2;
28    private String encounterFlavorTextOwlbear1;
29    private String encounterFlavorTextOwlbear2;
30    private String encounterFlavorTextBoss;
31
32    private String attackFlavorText1;
33    private String attackFlavorText2;
34 }
```



3.4 The Text Adventure Main Class

The text adventure class is the main it contains some methods that may end up in new classes we create down the line but runs the main game.



```
16 public class theTextAdventure {
17     Scanner input = new Scanner(System.in);
18     String userName;
19
20     public Hero warrior = new Hero( health: 100, strength: 80, speed: 30, description: "The Warrior...", name: "Warrior", endurance: 40);
21     public Hero mage = new Hero( health: 100, strength: 60, speed: 40, description: "The Mage...", name: "Mage", endurance: 50);
22     public Hero thief = new Hero( health: 100, strength: 40, speed: 60, description: "The Thief...", name: "Thief", endurance: 60);
23     public Room[][] room = new Room[10][10];
24     public Coffee coffee = new Coffee( name: "Coffee");
25     public Treasure treasure = new Treasure( name: "Gold Box", amount: 10);
26     public Heart heart = new Heart( name: "Heart");
27     public HealthPotion healthPotion = new HealthPotion( name: "Health potion");
28     public Random rand = new Random();
29     public Monster monster1 = new Monster( health: 50, strength: 40, speed: 15, description: "Monster 1", name: "The Monster", treasure, alive: true, xpi: 3);
30     public Monster monster2 = new Monster( health: 40, strength: 30, speed: 10, description: "Monster 2", name: "The Monster", coffee, alive: true, xpi: 2);
31     public Monster monster3 = new Monster( health: 30, strength: 20, speed: 8, description: "Monster 3", name: "The Monster", healthPotion, alive: true, xpi: 1);
32
33
34     public static void main(String[] args) {
35         Scanner input = new Scanner(System.in);
36         theTextAdventure myApp = new theTextAdventure();
37         int choice = myApp.startMenu();
38
39         Room[][] room = new Room[10][10];
40
41
42         if (choice == 1) {
43
44             Hero theHero = (myApp.selectHero());
45
46             theTextAdventure.createWorld()
47         }
48     }
49 }
```



4. Test Results

Table 2 below contains the current status of implemented and tested requirements.

Table 2 - Test Results

Req. No	Req. Name	Test Result
1	MVC Architecture	PASSED
2	Start Menu	PASSED
3	Normal game menu	NOT IMPLEMENTED
4	Implement character class	PASSED
5	Implement hero subclass	PASSED
6	Create initial story elements	PASSED
7	Design Map Outside Java	PASSED
8	Fill Room Class	NOT IMPLEMENTED
9	Implement Designed Map	FAILED
10	Create initial story elements	PASSED
11	Add Monsters	NOT IMPLEMENTED
12	Map navigation	NOT IMPLEMENTED
13	Encounter Menu	NOT IMPLEMENTED
14	Printable map screen	NOT IMPLEMENTED
15	Death Menu	NOT IMPLEMENTED
16	Treasure Score	NOT IMPLEMENTED
17	High Score	NOT IMPLEMENTED
18	Additional Flavor Text	NOT IMPLEMENTED
19	Save game function	NOT IMPLEMENTED
20	Implement Item Functions	NOT IMPLEMENTED
21	Key and Doors	NOT IMPLEMENTED
22	Level System	NOT IMPLEMENTED
23	Boss Fight	NOT IMPLEMENTED
24	End Screen Menu Win	NOT IMPLEMENTED
25	Difficulty System	NOT IMPLEMENTED



5. Summary and Conclusion

The text adventure game is coming along it is our belief we have finished all the classes we need for the game to operate as far as we know now. The start menu has been implemented currently you can only start a game and exit as we have not finished the view high score and load game functions. The choose hero menu has been implemented with a star chart of the heroes stats, you can also choose your hero. The world has been created using a object multidimensional array for Room we have filled the rooms with items and monsters where we desire them, we also have been developing the functionality for random item and monster drops in rooms. That feature is not yet tested we are still trying to figure out how to move around the map.

5.1 Weekly Progress

Below is a short summary of what was done each week.

5.1.1 Week 1

During this week we spent several hours planning the structure of our text based game. This included deciding which features were to be implemented and which were to be cut. This included deciding how to structure the classes and methods. There is still work to do on some aspects of structure and decision such as how we will implement the classes within the game and what abilities each will have as well as how they will be used through methods, classes, or some specific condition. This is shown on our requirements list as the least prioritized as it was decided to be worked on later when we choose the different abilities for each character. Our biggest challenge was talking through exactly which features of the game we were comfortable in completing in the allotted time and which ones we decided not to. Luckily being the optimistic group we are most features are staying in the plan right now. We learned it is a time consuming process to plan a game, even as simple as this one. After this week we are feeling much more confident and on the same page now.

5.1.2 Week 2

Most of time has been spent on figuring out git as it was a new experience for a majority of the group and issues popped up frequently. These issues have continuously have costed hours of valuable programming time our solution will be creating a branch for each of us after we merge to the master and merging through out the week when we meet up to discuss progress and talk game plan. As a group we decided we wanted to take the next step in learning about development architecture so we have converted our text adventure game to a MVC architecture. We have had some trial and error figuring out exactly how we go about implementing but I believe we are starting to get the hang of it. We have implemented the Start game menu which only is capable of quitting and starting a game. We have also implemented the choosing of the hero menu where we also print out a bar chart made of stars as a visual representation of the heroes skills. Neither of these features are yet to be break proof yet, we need to learn more about try catch or other features that can combat the wrong variable type. We have also implemented the starting story description but the place at which it is located is subject to change. Due to set backs with git we were not able to get the map out in a timely manner and have just gotten within the past 2 days and needs some changes as to how it builds the map. We have started on developing the fighting logic but have yet to be able to test as we are still learning the MVC figuring out how to get a specific monster from a list of monsters or even have the room return the monster has proven difficult. Although we are confident these things can be worked out and we believe we are headed in the right direction.

5.1.3 Week 3

TODO.



5.1.4 Week 4

TODO.

5.1.5 Week 5

TODO.

5.1.6 Week 6

TODO.

5.1.7 Week 7

TODO.

5.2 Difficulties and challenges

Below is a list of notable challenges that came up during this project and that took a long time to solve.

5.2.1 Getting Started with GIT Difficulty 1

Due to the inexperience with git we have run into numerous issues and difficulties costing us hours of potential coding time. Our solution is to make separate branches for each member of the group and merge when we meet during the week.

5.2.2 Hero Navigation Between Rooms Difficulty 2

We had thought we solved it and moved on but turns out not to be the case. We have the basic idea as to how it must be done but solving has given us the most trouble in how we can give it the necessary functionality, without having to write long code. We decided since it is close to deadline to prioritize that above all for the next week and moved on fine tuning our current code.

5.2.3 Learning MVC architecture 3

Although it's not required we want to implement this architecture design to our game. It has probably set us back a bit but we believe we are finally getting the hang of it and are sure we can make it work for the better of our project. It is also a very important lesson to be learned.

5.3 Correctness of time estimates

We did not have the correct requirements during our first meeting and also didn't have the correct times on the last report so although I'd like to say we were accurate I can't say for sure but I believe we would probably be ahead of schedule had we not had issues with our git setup. So we have a solution in mind for after we merge to the master.



5.4 Priority decisions

Our priorities may have been a little out of order but our primary problem was trying to do too much quickly we should have developed slowly making improvements 1 step at a time instead of trying to do everything at once. We should have attempted to get a minimum viable product out rather than what we have, but there is hope for us yet we can definitely improve on what we have and produce a high quality text adventure game.

5.5 Conclusion

<Instructions: Look back on the whole project. Here you can write a bit more freely about your thoughts on this project. What was your overall experience? How was the teamwork? What did you learn? Can you list some points that you will do better in next project? Other thoughts. >



6 References