

### 3. WRITTEN RESPONSES

#### 3 a.

##### 3.a.i.

The program provides the user with the entertaining experience of a chose-your-adventure style game mixed with an RPG-like stat system in which the choices of the player affect not only the story that is told as well as some variables which are key to progressing to the end of the game.

##### 3.a.ii.

The program allows the user to click with the mouse on specific buttons with specific texts which can change the screen, change values of variables, and change images URL, leading to the next step of the story .

##### 3.a.iii.

The program allows the user to click with the mouse on specific buttons with specific texts which can change the screen leading to the next step of the story (sometimes changing the value of specific variables as well).

#### 3 b.

##### 3.b.i.

```
var stats = [0, 0, 0];
```

##### 3.b.ii.

```
//character choice
onEvent("boy", "click", function( ) {
  stats = [3,1,randomNumber(1,3)];
  character = 1;
  character_image();
  console.log("Male Character'Stats");
  console.log("Strength " + stats[0]);
  console.log("Intelligence " + stats[1]);
  console.log("Harmony " + stats[2]);
  setScreen("event0");
  console.log("Current Health: " + health);
});

onEvent("girl", "click", function( ) {
  stats = [1,3,randomNumber(1,3)];
  character=2;
  character_image();
  console.log("Female Character'Stats");
  console.log("Strength " + stats[0]);
  console.log("Intelligence " + stats[1]);
  console.log("Harmony " + stats[2]);
  setScreen("event0");
```

##### 3.b.iii.

The name is "stats"

##### 3.b.iv.

It represents the Strength, intelligence, and Harmony of the user's character, which are values that are changed depending on which button the user clicked at the in the first screen (either "Boy" or "Girl"). Furthermore the values determined on the list are used to determine if certain choices(such as the "Fight", "Run", and "Befriend" ) will succeed or fail, which in turn determine the health lost or gained as well as the screen the user is sent to. Furthermore at the third to last screen of the program the values on the "stats" list are again used, as one of the values is raised by one and chosen to be the new value of a variable used later in the program.

### 3.b.v.

If I were to not use the selected list the Strength, intelligence, and Harmony of the user's character would be a variable each, which when taking into account how these values are used in multiple parts of the code (influencing 10 out of 13 screens) it would lead to the code being way harder to write due to the larger amount of variables and it would also lead to the code becoming way harder to understand.

## 3 c.

### 3.c.i.

```
function dragon() {
  if ((dragonhealth == 3)) {

} else if ((dragonhealth == 2)) {
  setImageURL("checkmark1", "checkmark.jpg");
  playSound("X2Download-(mp3cut.net)-(2).mp3");
  console.log(dragonhealth);
} else if ((dragonhealth == 1)) {
  setImageURL("checkmark2", "checkmark.jpg");
  playSound("X2Download-(mp3cut.net)-(3).mp3");
} else if ((dragonhealth == 0)) {
  setImageURL("checkmark3", "checkmark.jpg");
  playSound("X2Download-(mp3cut.net)-(1).mp3");
  setScreen("victoryA5");
  stopSound("X2Download.app---Undertale-OST_-100---Megalovania-(128-kbps)-(mp3cut.net)-(1).mp3");
} else {

}
}
```

erfranke.github.io/codePrint/

3, 18:50  
290 | }

<https://bakerfranke.github.io/codePrint/>

### 3.c.ii.

```
291 function attack_test() {
292   if (weapon >= 3){
293     dragonhealth = dragonhealth - 1;
294     console.log ("Attack Successful");
295     dragon();
296     dragon_attack();
297     console.log("Current Health: " + health);
298     death ();
299   } else {
300     console.log ("Attack Failed");
301     dragon_attack();
302     console.log("Current Health: " + health);
303     death ();
304   }
305 }
306 }
307
```

### 3.c.iii.

The procedure checks the dragon\_health value and runs a line of code depending on said value in order to help the user understand that his/hers chosen stat is high enough to successfully attack the dragon through a visual and audio queue. Furthermore, if the value for dragon\_health is found to be low enough, the boss battle music will also stop and the screen changes to the victory screen.

### 3.c.iv.

The algorithm, through an if statement, checks if the value of a predetermined variable called `dragon_health` is equal to three and if the value is found to be equal to three nothing happens as three is the base value for `dragon_health`. If the value of `dragon_health` is not found to be three then the algorithm moves to the first else if statement which checks if the `dragon_health` value is equal to 2 and if the value is found to be 2 the algorithm will set the image URL for "checkmark1" to "checkmark.jpg" and trigger a sound queue. But if the value is also not found to be two then the algorithm will, through another else if statement, check if the value is equal to 1 which if it is the same thing will happen except the image URL for "checkmark2" will be changed. And if the value is also not found to be 1 then the algorithm will check if the value is 0 and if it is the same thing will happen except the image URL for "checkmark3" will be changed, the screen will also be changed, and the battle music will stop. If the value is not found to be 3, 2, 1, or 0 then nothing happens.

### 3 d.

#### 3.d.i.

First call:

checks to see if the `dragon_health` value has been lowered to two after an if statement that can possibly lower said value is called, in order to give an audio and visual feedback to the user that said value was lowered.

Second call:

checks to see if the `dragon_health` value has been lowered to zero after an if statement that can possibly lower said value is called, in order to change visually and audibly signal the user's victory and the end of the program.

#### 3 d.ii.

Condition(s) tested by first call:

the call checks if the value of dragon health has been decreased to 2

Condition(s) tested by second call:

the call checks if the value of dragon health has been decreased to 0

#### 3.d.iii.

Results of the first call:

set the image URL for "checkmark1" to "checkmark.jpg" and trigger a sound queue.

Results of the second call:

set the image URL for "checkmark3" to "checkmark.jpg", trigger a sound queue, stop battle music, and change screen to the victory screen.