

Submission Worksheet

CLICK TO GRADE

<https://learn.ethereallab.app/assignment/IT114-006-S2024/it114-number-guesser-4/grade/sb57>

IT114-006-S2024 - [IT114] Number Guesser 4

Submissions:

Submission Selection

1 Submission [active] 4/30/2024 12:44:07 AM

Instructions

^ COLLAPSE ^

Create the below branch name

Implement the NumberGuess4 example from the lesson/slides

<https://gist.github.com/MattToegel/aced06400c812f13ad030db9518b399f>

Add/commit the files as-is from the lesson material (this is the base template). You may want to push this commit so you can open the pull request and keep it open.

Pick two (2) of the following options to implement

Display higher or lower as a hint after a wrong guess (only after a wrong guess that doesn't roll back the level)

Implement anti-data tampering of the save file data (reject user direct edits)

Add a difficulty selector that adjusts the max strikes per level (i.e., "easy" 10 strikes, "medium" 5 strikes, "hard" 3 strikes)

Display a cold, warm, hot indicator based on how close to the correct value the guess is (example, 10 numbers away is cold, 5 numbers away is warm, 2 numbers away is hot; adjust these per your preference) Only display this when the wrong guess doesn't roll back the level

Add a hint command that can be used once per level and only after 2 strikes have been used that reduces the range around the correct number (i.e., number is 5 and range is initially 1-15, new range could be 3-8 as a hint)

Implement separate save files based on a "What's your name?" prompt at the start of the game (each person gets their own save file based on user's name)

Fill in the below deliverables

Save changes and export PDF

Git add/commit/push your changes to the HW branch

Create a pull request to main

Complete the pull request (don't forget to locally checkout main and pull changes to prep for future work)

Upload the same PDF to Canvas

Branch name: M3-NumberGuesser-4

Tasks: 7 Points: 10.00

^ COLLAPSE ^

Task #1 - Points: 1

Text: Chosen Option and Details

Checklist

*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|--|
| <input type="checkbox"/> #1 | 1 | Mention which option you picked |
| <input type="checkbox"/> #2 | 1 | Explain the logic of how you solved/implemented the chosen option (concrete details). Explain how the code works, don't just paste code snippets |

Response:

I picked option 1. Display higher or lower as a hint after a wrong guess (only after a wrong guess that doesn't roll back the level). In order to implement this feature, I edited the processGuess method. I added another if/else statement inside the existing one to compare the input to the number and print whether to go higher or lower with the next guess based off of whether the input was higher or lower than the number.

Task #2 - Points: 1

Text: 2+ Screenshots of code and demo

Checklist

*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|--|
| <input type="checkbox"/> #1 | 1 | Show implementation working by running the program |
| <input type="checkbox"/> #2 | 1 | Clearly caption the screenshot of what you're showing |
| <input type="checkbox"/> #3 | 1 | The code screenshot(s) clearly show the code specific to the feature |
| <input type="checkbox"/> #4 | 1 | A comment with the UCID/date is visible near the code change(s) |

Task Screenshots:

Gallery Style: Large View

Small Medium Large

```
123
124 private void processGuess(int guess) {
125     if (guess < 0) {
126         return;
127     }
128     System.out.println("You guessed " + guess);
```

```

129         if (guess == number) {
130             win();
131             pickNewRandom = true;
132         } else {
133             System.out.println(x:"That's wrong");
134             if (guess < number) {
135                 System.out.println(x:"Go higher!");           //Shreya Bose
136             } else {                                           //sb57
137                 System.out.println(x:"Go lower!");           //February 12, 2024
138             }
139             strikes++;
140             if (strikes >= maxStrikes) {
141                 lose();
142                 pickNewRandom = true;
143             } else {
144                 saveState();
145             }
146         }
147     }
148 }

```

This screenshot specifically shows a snippet of the processGuess method which is what I edited in order to implement a hint for wrong answers based on the guess.

Checklist Items (3)

#2 Clearly caption the screenshot of what you're showing

#3 The code screenshot(s) clearly show the code specific to the feature

#4 A comment with the UCID/date is visible near the code change(s)

```

PS C:\Users\Shreya\Desktop\IT114\sb57-IT114-006\Module-3>java NumberGuesser4.java
Welcome to NumberGuesser4.0
To exit, type the word 'quit'.
Welcome to level 1
I picked a random number between 1-10, let's see if you can guess.
Type a number and press enter
5
You guessed 5
That's wrong
Go lower!
Type a number and press enter
4
You guessed 4
That's wrong
Go lower!
Type a number and press enter
3
You guessed 3
That's right!
Welcome to level 2
I picked a random number between 1-15, let's see if you can guess.
Type a number and press enter
1
That's wrong
Go higher!
Type a number and press enter
15
You guessed 15
That's wrong
Go lower!
Type a number and press enter
7
You guessed 7
That's wrong
Go lower!
Type a number and press enter
6
You guessed 6
That's right!
Welcome to level 3
I picked a random number between 1-20, let's see if you can guess.
Type a number and press enter

```

In this screenshot, I play the game in the terminal after the implementation. In the first round, my guesses were too high so it asked me to go lower until I guessed the right number. In the second round, I first guessed too low, and it asked me to go higher. I then guessed too high so it asked me to go lower.

Checklist Items (2)

#1 Show implementation working by running the program

#2 Clearly caption the screenshot of what you're showing



Implementation 2 (4 pts.)

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Task #1 - Points: 1

Text: Chosen Option and Details

^ COLLAPSE ^

Checklist

*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|--|
| <input type="checkbox"/> #1 | 1 | Mention which option you picked |
| <input type="checkbox"/> #2 | 1 | Explain the logic of how you solved/implemented the chosen option (concrete details). Explain how the code works, don't just paste code snippets |

Response:

I picked option 4. Display a cold, warm, hot indicator based on how close to the correct value the guess is (example, 10 numbers away is cold, 5 numbers away is warm, 2 numbers away is hot; adjust these per your preference) Only display this when the wrong guess doesn't roll back the level. In order to implement this feature, I edited the processGuess method again. I first find the absolute value of the difference between the number and the incorrect guess. I then once again added another if/else if/else statement inside the existing one. If the difference is greater than 5, it prints "Cold", if it is greater than 2 but less than or equal to 5, it prints "Warm", otherwise it prints "Hot".



Task #2 - Points: 1

Text: 2+ Screenshots of code and demo

^ COLLAPSE ^

Checklist

*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|--|
| <input type="checkbox"/> #1 | 1 | Show implementation working by running the program |
| <input type="checkbox"/> #2 | 1 | Clearly caption the screenshot of what you're showing |
| <input type="checkbox"/> | 1 | The code screenshot(s) clearly show the code specific to the feature |

| | | |
|----|---|--|
| #3 | | The code screenshot(s) clearly show the code specific to the feature |
| #4 | 1 | A comment with the UCID/date is visible near the code change(s) |

Task Screenshots:

Gallery Style: Large View

SmallMediumLarge

```
123
124     private void processGuess(int guess) {
125         if (guess < 0) {
126             return;
127         }
128         System.out.println("You guessed " + guess);
129         if (guess == number) {
130             win();
131             pickNewRandom = true;
132         } else {
133             System.out.println(x:"That's wrong");
134             int diff = Math.abs(number - guess);
135             if (diff > 5) {
136                 System.out.println(x:"Cold");
137             } else if (diff > 2) {
138                 System.out.println(x:"Warm");
139             } else {
140                 System.out.println(x:"Hot");
141             }
142             if (guess < number) {
143                 System.out.println(x:"Go higher!");
144             } else {
145                 System.out.println(x:"Go lower!");
146             }
147             strikes++;
148             if (strikes >= maxStrikes) {
149                 lose();
150                 pickNewRandom = true;
151             } else {
152                 saveState();
153             }
154         }
155     }
156
```

This screenshot shows the entire processGuess method.

Checklist Items (3)

- #2 Clearly caption the screenshot of what you're showing
- #3 The code screenshot(s) clearly show the code specific to the feature
- #4 A comment with the UCID/date is visible near the code change(s)

```
123
124     private void processGuess(int guess) {
125         if (guess < 0) {
126             return;
127         }
128         System.out.println("You guessed " + guess);
129         if (guess == number) {
130             win();

```

```

131         pickNewRandom = true;
132     } else {
133         System.out.println(x:"That's wrong");
134         int diff = Math.abs(number - guess);
135         if (diff > 5) {
136             System.out.println(x:"Cold");
137         } else if (diff > 2) { //Shreya Bose
138             System.out.println(x:"Warm"); //sb57
139         } else { //February 12, 2024
140             System.out.println(x:"Hot");
141         }

```

This screenshot specifically shows the snippet of the processGuess method which I edited in order to implement a hint on how cold, warm, or hot the incorrect guess is through an if/else if/else statement.

Checklist Items (3)

- #2 Clearly caption the screenshot of what you're showing
- #3 The code screenshot(s) clearly show the code specific to the feature
- #4 A comment with the UCID/date is visible near the code change(s)

```

Welcome to level 2
I picked a random number between 1-15, let's see if you can guess.
Type a number and press enter
1
You guessed 1
That's wrong
Cold
Go higher!
Type a number and press enter
7
You guessed 7
That's wrong
Warm
Go higher!
Type a number and press enter
10
You guessed 10
That's wrong
Hot
Go higher!
Type a number and press enter
11
You guessed 11
That's wrong
Hot
Go higher!
Type a number and press enter
12
You guessed 12
That's right!
Welcome to level 3
I picked a random number between 1-20, let's see if you can guess.
Type a number and press enter

```

In this screenshot, I play the game in the terminal after the implementation. When my guess was too far away from the number, it told me I was cold, and the output changed as my guesses got closer to the number.

Checklist Items (2)

#1 Show implementation working by running the program

#2 Clearly caption the screenshot of what you're showing

Misc (2 pts.)

^ COLLAPSE ^

Task #1 - Points: 1

Text: Reflection

Checklist

*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|--|
| <input type="checkbox"/> #1 | 1 | Example prompts: Learn anything new? Face any challenges? How did you overcome and issues? |
| <input type="checkbox"/> #2 | 1 | At least a few logical sentences related to the assignment. |

Response:

I found the other prompts a bit challenging to implement. I tried but could not tell if I was working in the right direction. I think I was able to understand these implementations pretty well though.

Task #2 - Points: 1

Text: Pull Request URL

Details:

URL should end with /pull/# where the # is the actual pull request number.

URL #1

<https://github.com/sb57-shreya/sb57-IT114-006/pull/5>

Task #3 - Points: 1

Text: Waka Time (or related) Screenshot

Checklist

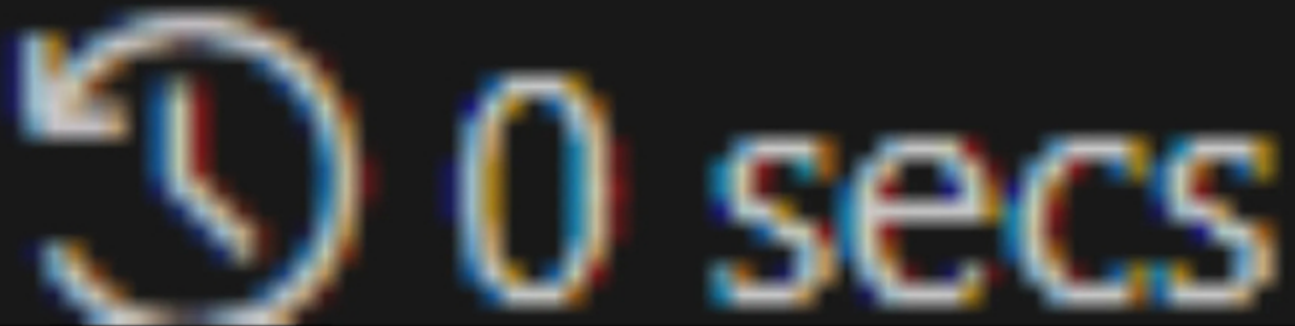
*The checkboxes are for your own tracking

| # | Points | Details |
|-----------------------------|--------|---|
| <input type="checkbox"/> #1 | 1 | Screenshot clearly shows what files/project were being worked on (the duration of time doesn't correlated with the grade for this item) |

Small

Medium

Large

A screenshot of a WakaTime interface. It features a dark background with a light gray horizontal bar. On the left, there is a circular arrow icon. To its right, the text '0 secs' is displayed in a light gray font.

I keep getting a "WakaTime working offline" message saying it will update when it is back online.

Checklist Items (1)

#1 Screenshot clearly shows what files/project were being worked on (the duration of time doesn't correlated with the grade for this item)

End of Assignment