

CS 111 Final Project

Self Assessment

Your group should fill out one copy of this form and include it with your assignment when you turn it in.

Group

Who's in your group?

1. Isaac Winoto
2. Nicole Wijaya
3. Ryan Asali

Goals

Say a few words about what you wanted the game to be like. Note that if you just wanted to write some code so you could get an good grade on the project, it's fine to admit that.

When we first planned the game out, we wanted our game to be a medieval, 1500s adventure labyrinth, where the primary goal was to defeat the evil wizard by picking up necessary tools and going through different doors. However, along the way, there are objects that can kill you even before you meet the final wizard. The scrolls are meant to help us get to the final door, which is where the wizard lies. However, almost every door and stage required a certain tool to get you to the next stage, so every tool has to be examined and used carefully! We created the game so that there is only a certain combination of tools that can allow us to win, and we found the final project to be challenging, but at the same time exciting and eye-opening.

Lessons learned

What went right?

We planned the code and story structure well, dividing the tasks within the group in a way that was fair and made sure everyone contributed. We worked well together and were on the same page for the whole assignment.

What went wrong?

Overall, we found the project really insightful and did not encounter a huge roadblock. Time management was a bit challenging because the final exams were around the same time as the final project due date, and it was quite difficult to go to office hours because of time zone differences.

What do you wish you knew when you started?

We wish we knew that the number of types, fields, and methods listed in the document were just the minimum requirements, because we realized quite late that the maximum number of elements was 35, making us have to rush in adding more elements to fulfill the total requirements.

Annoying grading bookkeeping

Types

What are the types you added, and what are they for?

1. **Scroll** was used to print instructions to help you navigate the game
2. **Pickaxe** was used to mine the diamonds
3. **Diamond-ore** was destroyed during mining to retrieve diamonds
4. **Diamond** was retrieved during mining and used to craft the sword
5. **Key** was used to unlock the locked door
6. **Stick** was used as one of the tools to craft the sword
7. **Wizard** is the villain of the adventure game, and has to be killed using the attack method to win the game
8. **Sword** was crafted and is needed to be able to attack the wizard
9. **Potion** can be drunk, and can either give you super-strength or kill you if it's poisonous
10. **Puppy** is a small dog that helps you with some final instructions before killing the wizard!

Fields

What are the fields you added, what types did you add them to, and what are they for?

1. **Amount** is a field of diamond, and is used to indicate the number of diamonds in your inventory.
2. **Stamina** is a field dark wizard, and describes the health of the wizard. Can be reduced by attacking the dark wizard.
3. **Position** is a field of key, and shows the orientation of the key (up or down).
4. **Text** is a field scroll, and is used to describe the text written on the scroll.
5. **Contents** is a field of diamond ore, and is used to indicate how much diamond can be mined from one diamond ore.
6. **Toxicity** is a field of potion, and is used to indicate if a potion is toxic(true) or not.
7. **Pot** is a field of person, and is used to determine if the person drank the potion.
8. **Key** is a field of door, and is used to indicate whether a key is necessary to unlock a door. If the field is "unnecessary", no key is needed to enter the door.
9. **Wiz** is a field of wizard, and is used to determine which door leads directly to the wizard.
10. **Dialogue** is a field of puppy and is used to print the puppy's words.

Procedures

What are the procedures you added or significantly modified from their original form, and what are they for?

1. **(new-diamonds)** makes a set of diamonds
2. **(new-sword)** makes a new sword
3. **(new-wizard)** makes a new wizard
4. **(new-potion)** makes a new potion
5. **(new-scroll)** makes a new scroll
6. **(new-pickaxe)** makes a new pickaxe
7. **(new-key)** makes a new key
8. **(new-stick)** makes a new stick
9. **(new-diamond-ore)** makes a new diamond ore
10. **(new-puppy)** makes a new puppy
11. **(create-sword)** is a procedure that checks if the player has the right ingredients to make a sword and combines them to form a sword.
12. **(If (string=? (door-key door) "unnecessary"))** checks if the door is locked or not
13. **(If (door-wiz door))** checks whether or not the door leads to the wizard

Methods

What are the methods you added or significantly modified from their original form, what types were they added to, and what are they for? Note that if you have three different methods for the same generic procedure, list each one separately.

1. **Read** is a method of scroll, and is used to print out the text of the scroll.
2. **Mine** is a method of diamond ore and will check if a pickaxe is in the player's inventory and will call mining if true.
3. **Mining** is a method of diamond-ore and will destroy a diamond ore after 3 times and drops the diamond.
4. **Unlock** is a method of door and will change the field key into "unnecessary" if the key is in the right orientation.
5. **Attack** is a method of wizard and decreases the wizard's stamina by 34 after every attack
6. **Die** is a method of person and will force the player to restart the game.
7. **Drink** is a method of potion and can give you super strength if the potion is safe or can kill you if the potion is poisonous.
8. **Turn** is a method of key, and switches the orientation of the key between up and down.
9. **Call** is a method of puppy and will print the string in the dialogue field of puppy.
10. **Go** is a method of door and was modified such that going through the door leading to the wizard without the appropriate materials will kill the player, and the player will be unable to go through any locked doors.

Total stuff we built

Write the total number of items listed above.

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