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HTML QUEST

CASTLE OF THE MAD KING

Learn HTML in a Fantasy World

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YOUR ARRIVAL

Have you ever had a dream that kept going after you woke up? That's the first question you ask yourself when you open your eyes and realize that you're lying on the damp, mossy ground of a forest clearing.

Then you hear the argument.

"That's it? I thought you said the spell would bring us a *hero*." The voice belongs to a woman, and she sounds distinctly annoyed.

"I said no such thing," answers the gruff voice of a much older man. "I said the spell would find us someone that could go on a quest—"

"How can you go on a quest if you're not a hero?"

"Well we aren't in a position to get choosy, are we?" the old man hisses back. "There isn't a hero in the entire kingdom who's willing to visit the castle now. Not after he fed his aunt to the crocodiles in the moat!"

You jerk yourself up to a sitting position, and immediately regret it. Your head aches. Looking around, you see two oddly dressed people across a misty clearing.

“Your hero’s awake,” the woman says sharply. “How are you going to send it back now?”

“No, we aren’t sending anyone back!” the old man replies. “This person comes from the land of the tapping machines. That might be the secret to stopping the mad king.” He glances at you for a moment, and then shrugs his shoulders. “Everyone smarter must have dodged my spell.”

It’s at this point that you realize something very strange is happening. The people arguing in the clearing are dressed like actors in some sort of renaissance fair. The woman is wearing a full-length princess dress fit for Cinderella’s ballroom. And the old man has an impressive white beard and flowing robes that make him look like a wizard on Halloween.



The old man looks rather annoyed

“This is a really weird dream,” you say to no one in particular.

“Pinch yourself,” the wizard-dressed man says sternly.

“What?”

“Go on, pinch yourself. Get it over with.”

For some reason, you do what he says. “Ouch!”

“Done now? Good. This is no dream. My spell, which appeared in your world as a book, has summoned you here.”

A book? What is he talking about? “I haven’t read any magic books,” you manage to stammer out.

The lady looks at the wizard. “Neither a hero nor particularly bright.”

“Some grogginess is to be expected—standard spell side-effects,” the wizard answers briskly. He turns back to you. “I didn’t say it was a spell book, you nitwit. It’s just a *book* book. It’s a book with the story of the mad king. You opened it, poof, and now you’re here. Except there wasn’t really a *poof* because we’ve had to cut back on the special effects recently, but that doesn’t matter. What does matter is that you’re here in the story, in our world, and you better wake up and make yourself useful before you get chopped up like the last hero we tried.”

Your headache isn’t getting any better.

“He’s expecting you to go on a quest,” says the princess-dressed woman.

“Obviously,” the wizard says. “I wouldn’t drag you all the way from your world to ours if you weren’t going to save something.”

The woman looks you over suspiciously. “You don’t look like much. Do you have any magic?”

You try to think. Didn’t your cousin show you a card trick one time? “I—uh—don’t think so,” you blurt out.

“Well then good luck stopping the mad king.” She gathers the hem of her dress so it won’t drag along the forest floor, and marches out of the clearing, pausing to give a final hard look at the wizard. “Merlin, I hope you have a plan.”

“Of course, of course. A much better plan this time, my lady. An excellent plan!”

As she walks off into the forest, her footsteps rustling into the distance, Merlin turns back to you. Before he can say anything else, you manage to shake off your complete confusion and start talking.

“Well, there seems to be some mix-up here. I’m not really one to stop a mad king—I mean, I’m just having a really weird dream and any minute my mom is going to shake me awake and tell me I’m late for school and breakfast—”

“It’s not a dream,” Merlin interrupts. “It’s a book. Listen, we haven’t got much time, and I can’t keep explaining the same thing to you over and over again.”

“What’s your plan?”

“There’s no plan.”

“But you said—”

“I was talking to the queen! The first rule of being a wizard is never admit to the boss when you don’t have a plan. That’s the way heads get lopped off.”

Your headache is definitely not getting any better, and now your stomach is starting to hurt too.

Merlin continues. “I don’t have a plan, but we do have a problem. The king has gone stark raving bonkers, and he just might end up killing half the kingdom if someone doesn’t stop him.”

“What?”

“That’s the first reasonable thing you’ve said. We don’t know *what* and we don’t *why*. The king wasn’t always crazy, but something happened two months ago. Without warning, he closed the castle to both friend and foe, and turned his back on the kingdom. And as you might imagine, without the rule of a wise king the kingdom is in anarchy—overrun by pillagers, bandits on the road, invading Vikings, people who don’t return their library books anymore, that sort of thing.” Merlin pauses.

“I don’t really have much experience with crazy kings,” you say weakly.

“Of course you don’t. But here’s what needs to happen. You must sneak into the castle, confront the king, and convince him to return to his senses.”

“If he’s truly crazy, how can I convince him of anything?”

“I have no idea. But you’re asking the wrong question. The first question is ‘how do you get inside the castle?’ Have a cup of tea and we’ll get started.”

Merlin hands you a half-empty mug of brackish water and begins scratching on a nearby sign with a stick. When he’s finished, there’s an odd word written on it.



“What’s that?” you ask.

“You’ve never seen a sign before?”

“But you’ve written something on it.”

“This marks the beginning of your quest using a magical language you’re going to learn—and you’d better learn quickly.” Seeing your puzzled face, Merlin sighs. “Don’t worry. It will all make sense soon enough.” He turns away. “Or we’ll be on to the next hero,” he mutters to himself.

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JUNIOR WIZARD SCHOOL

Merlin is standing behind you, slowly waving a stick back and forth in the air.

“So,” he asks, “How much magic do you know?”

You swallow hard. “None?” you try to say, but it comes out like a tiny squeak.

“None?” Merlin stops waving the stick. “None?” He focuses on you with a steely gaze. “Actually, that’s splendid.”

“Really?”

“No, not really. You’re going to be killed in there, diced up, and put in a pie. But ‘splendid’ sounds more positive, wouldn’t you say? Now follow me.”

With that, Merlin marches to the edge of the clearing. You hesitate for a second, and then—realizing that the only thing worse than being shouted at by a crotchety old wizard is being left alone in a mysterious and possibly magical forest—you run after him.

Merlin keeps marching, without glancing back. You follow him out of the clearing and up a steep hill, rushing and almost out of breath. All around you is a tangle of twisted branches and rocks. As you stumble over stones and roots, a thought strikes

you. “For someone who seems so old, he certainly can move fast...”

“I’m not as old as you think!” Merlin calls back.

“How did you—”

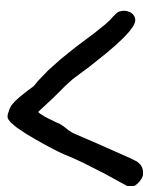
“Hear what you thought? It’s not that difficult.” Merlin stops, turns to face you, and points a single finger at your forehead. “You see, your head is mostly empty and there’s quite an *echo* in there.” He punctuates the word *echo* by tapping you squarely in the forehead. “Now where do you think we are?”

You take a moment to look around. You seem to have reached a rocky clearing at the top of a hill. In front of Merlin is an enormous boulder. “Are we on some sort of hill in the forest?”

Merlin scoffs. “This is Junior Wizard School!” he proclaims grandly. “Again, there were some budget cuts.” He coughs. “Listen, you get exactly three lessons from me, and then you’re on your own with the mad king. Let’s get started.”

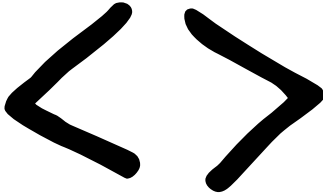
LESSON 1. TAGS

Using his stick, Merlin scratches a strange pointy bracket in the dirt.



“It all starts with a *bracket*. The bracket is the start of all things. And it’s also the end of all things.”

With that, he scratches a second pointy bracket, next to the first. This one is flipped the other way:



“These brackets always come in pairs. But they’re quite useless on their own. The magic happens when you put a word inside, between the two pointy brackets. I’ll demonstrate.”

Merlin stops and looks at you expectantly. After a long pause, he grunts in frustration.

“Well, give me a word already!”

“A word?” you ask.

“Anything will do! Come on now, think of something!”

You stare dumbly at the giant boulder next to Merlin. “How about ‘rock’?”

Merlin nods approvingly and gets to work on a new set of scratches:

<rock>

“Voila! Two brackets, with a word in between. No spaces, no punctuation, no weird symbols—we don’t tolerate that sort of nonsense here. Just some letters between two pointy brackets. We wizards call this a *tag*.”

“It doesn’t seem like much.”

“No, it doesn’t seem like much. Not to the average nitwit, anyway,” he mutters under his breath. “But a tag is the very first ingredient in the language of magic, and you’re going to need

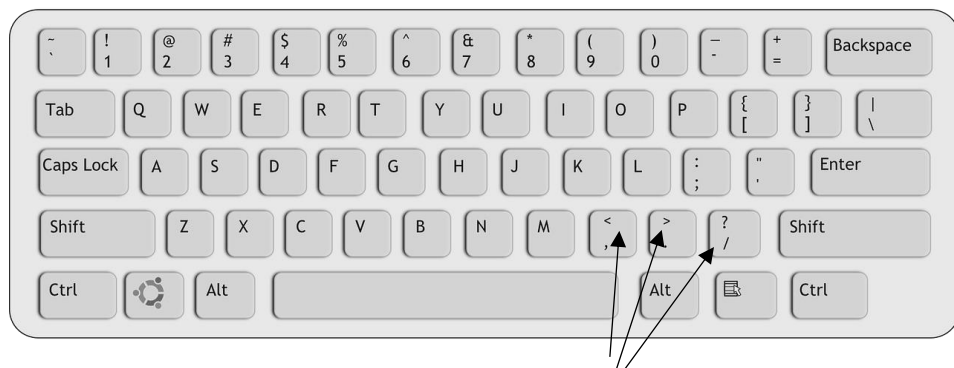
some magic when you meet the mad king.” Merlin pauses. “Do you have a computer handy?”

“A computer?” you ask in confusion.

“In our land, we follow an oral tradition. If I want to cast a spell, I speak it out loud.” Merlin looks at you and frowns. “But you are clearly not a wizard, so that isn’t going to work for you. In your world, you need to use a computer to work any magic at all.”

“How is a computer going to help with magic?”

“We’ll get to that later. For now, you should just find your computer and make sure you can use the two bracket keys. Usually, you’ll find them next to the letter M, sharing space with the comma and the period. You need to hold down the Shift key to use them. Pay attention to the forward slash / too, because you’ll need that one in a minute.”



“Give it a go now, before things start to get sticky. See if you can type them on your computer—it doesn’t matter where. You can’t afford to fumble when you meet the mad king.”

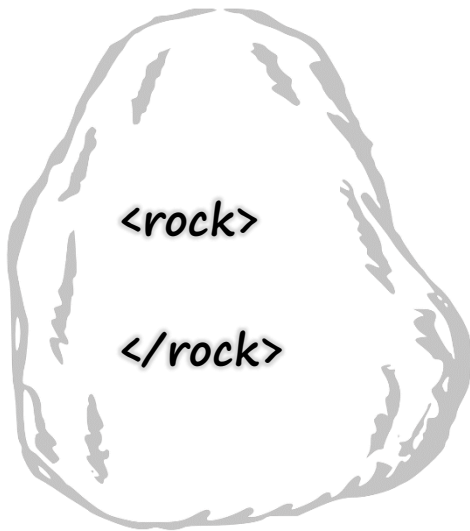
LESSON 2. ELEMENTS

Merlin stands by the boulder, looking it up and down. “Do you know what an element is?”

“Like earth, fire, water, that sort of thing?” you ask brightly.

“No. We wizards have a different sort of element. Look.”

Merlin waves his hand and, much to your surprise, glowing letters appear on the surface of the boulder.



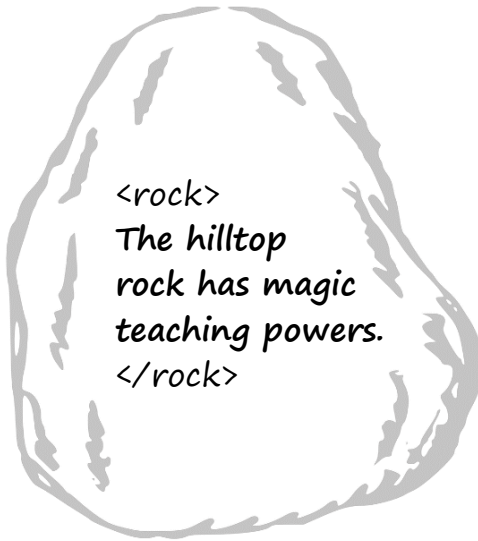
“What do you see here?”

You squint at the glowing letters. “There’s a tag like what you wrote before. And another tag that looks a little different.”

“Yes, exactly. The second tag has a slash after the first bracket. This combination tells us something special. The first tag, `<rock>`, is the *start tag*. The second tag, `</rock>` is the *end tag*. Altogether this makes one complete rock *element*.”

“But what’s the point of having two pieces for the same thing?”

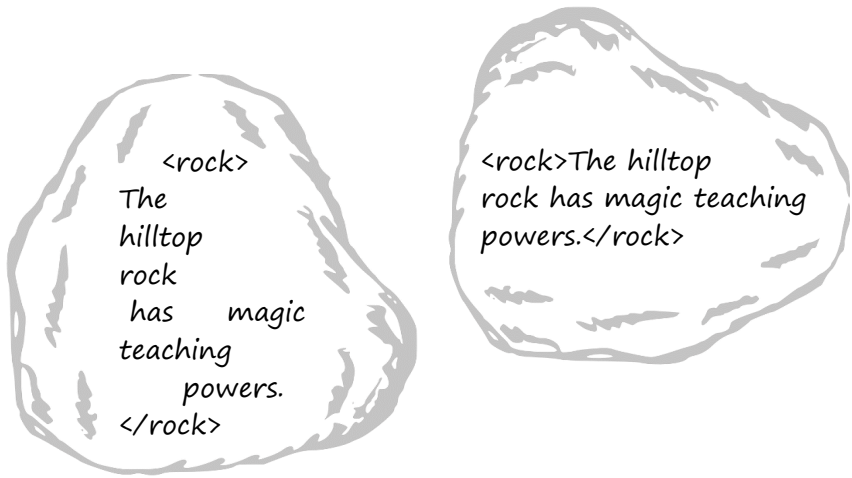
“Ah, yes, well that’s the interesting part! An element is a special sort of container. When you have a start tag and an end tag you can put something inside. Look!” Merlin waves his hand again and three lines of text appear on the rock, between the two tags that were there a moment ago.



“Now I’ve put a little bit of text inside our rock element.”

“Why?”

“Because I can.” Merlin looks at you with a sympathetic expression. “Right now, none of this does anything. It’s just a way to arrange words and give them meaning. But once you learn to do this yourself, you’ll be able to apply it to other things—messages, invocations, magic spells, you’ll see.” He turns back to the rock. “One more thing. When you put text inside an element, extra spaces don’t really matter. They are squashed away into nothingness. So these rocks over here may look a little different, but as far as any decent wizard is concerned, they are exactly the same.”



“Now it’s time for a test. Don’t look so panicked! This is just for practice. But in the next chapter, your knowledge *will* be a matter of life and death.” Merlin coughs politely. “So I hope you’ve been paying attention. I have three questions for you.”

- 1) How many elements are on each rock?
- 2) How do you tell the difference between a start tag and an end tag?
- 3) In Chapter 1, why did I write the tag `<quest>` on a sign?

“Try to answer them all yourself before you read my answers,” Merlin says sternly.

You read the questions and prepare to turn the page.

“I’m not joking,”

“I was just about to—”

“You don’t need to write it down. Just read each question and make sure you have a decent answer before you flip the page. It’s for your own good.”

“All right, here are the answers.”

- 1) There is one element on the rock. This element has two tags (a start tag and an end tag) and some text content inside.
- 2) When you write an end tag, you add put a / after the <. That one extra character makes the difference
- 3) The word <quest> is a start tag that represents the beginning of your adventure. If you make it to the matching end tag later in this book, it means you’ve successfully completed your quest.

LESSON 3. NESTING

Merlin leans on the boulder and eyes you carefully. “Ready? This is the last lesson you’re getting from me.”

You nod your head quietly.

“I just showed you how to make an element. You can keep it empty if you want, or you can put text inside, as you saw. And you’ve got one more choice. You can put one element *inside* another.”

“Like a rock with another rock in it?” you ask.

“Have you ever seen a rock with another rock in it?” Merlin retorts. “No, imagine there are two different elements—one for the rock and one for the forest. Obviously, the rock is inside the forest, so it makes sense to put the <rock> element inside the <forest> element.”

Merlin waves his hand and a new block of text appears on the rock in glowing letters.

<forest>
<rock>The hilltop rock has magic teaching
powers.</rock>
</forest>

“This trick is called *nesting*. It’s pretty simple, really. To put one element inside another, just make sure you stick the new element between the start and end tags of the first element. In this case, that means putting the whole rock element in between <forest> and </forest>. I also decided to put some text inside the rock element, but I could have left that out if I wasn’t in the mood.”

“Sounds easy enough, I guess,” you say uncertainly.

“You’re going to try it out. But to make things interesting I’m going to bring a visitor.” He snaps his fingers and you hear a rustle in the distance, followed by a loud snort.

“What’s that?”

“A wild boar named Patrick. Very, very cranky. Strong too, with big teeth. Hasn’t eaten in days, and he just realized that someone sat on his favorite backscratcher and broke in clean in half. He’ll be here in about two minutes.”



Patrick is having a very bad day

“What do we do?” you ask in a panic.

“Oh, I’m off to get some more tea. Patrick is coming to see *you*.”

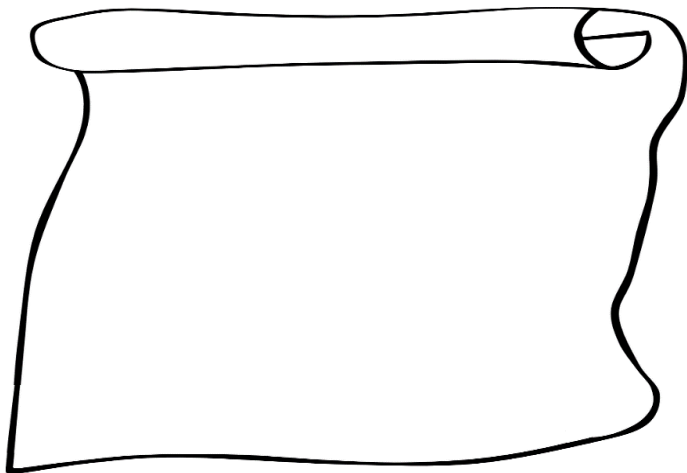
Now you hear another, closer snort, followed by a crashing of bushes on the hill slope.

“How can I stop him? Merlin, please!”

“Well, it’s easy actually, if you’ve been paying attention. Make a boar element and a cage element. Put the boar element in the cage, and there he’ll be, locked up tight. But you haven’t much time to do it.”

You rush over to the giant boulder. “How do I—”

“No need to get fancy. You can use ordinary pen and paper. Put it here, in the scroll in this book. Remember, a cage element and a boar element is all you need.”



Merlin steps behind the boulder. “I’ll be right back!” he calls cheerily. “When you think you’ve written the right stuff, flip the page, but not before.”

Finished the job? You should have something like this:

```
< cage >
```

```
< boar >  
< / boar >
```

```
< / cage >
```

The next thing you know, you’re standing next to a shining steel cage. Inside the cage, a grunting boar prances from one side to the other.

“Well done!” Merlin pokes his head out from behind the boulder and beams approvingly. “Just so we’re clear, you should remember that spaces and blank lines don’t matter. You could put the boar and the cage on the same line, as long as you’ve got the right order of tags. It’s a bit harder to read, but it means the same thing.”

```
< cage > < boar > < / boar > < / cage >
```

Merlin marches over to the cage and snaps the lock open. You stare, your mouth dangling open, as the boar trots out and sniffs Merlin’s leg.

“Remember I told you nothing is life or death in this chapter,” Merlin explains. “It’s just a little lesson with a friend of mine.” He hands the boar what looks like a frosted cinnamon bun, which it devours noisily.

“I could go for one of those—” you say eagerly.

Merlin continues without paying any attention to you. “Now things can get quickly get messy if you’re piling on the elements. You might put a bunch of elements inside one element, one after the other. For instance, maybe you have a

cage with lots of different animals in it. That looks like this next example.”

```
<cage>  
<snake></snake>  
<boar></boar>  
<lion></lion>  
</cage>
```

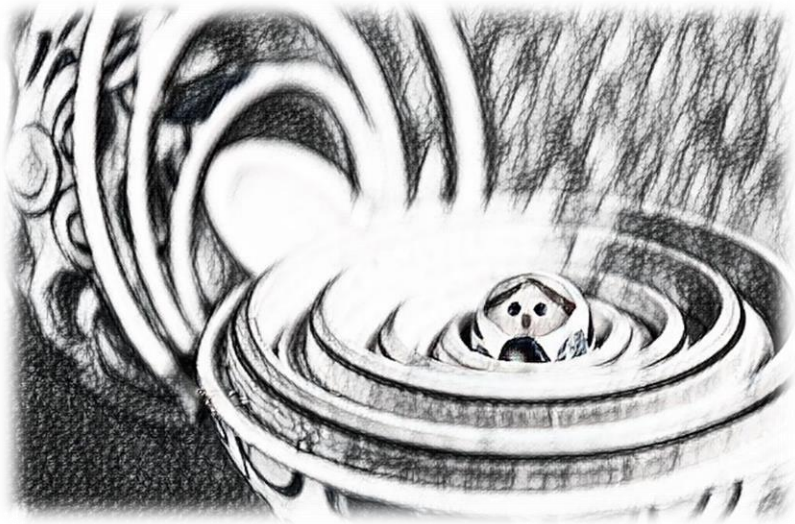
“People usually write this out with a few extra spaces so it’s easy for you see the difference between the cage and its contents. It’s not necessary, but it’s a nice touch.”

```
<cage>  
  <snake></snake>  
  <boar></boar>  
  <lion></lion>  
</cage>
```

Just then, the boar gives another loud snort and bounds back down the hill, crashing through the underbrush as it goes.

Merlin continues without a pause. “You can put as many elements as you want inside another element. Or, you might stuff one element inside another and then put that element inside another, and so on. Have you ever seen those dolls that fit together, one inside the other?”

You shake your head.



Open one doll and there's another inside

“Well it’s a bit like that. One element inside another inside another. You can go as many levels deep as you want. Take a look at this next example.”

```
<zoo>  
  <building>  
    <cage>  
      <boar></boar>  
    </cage>  
  </building>  
</zoo>
```

“Do you have any idea what it’s all about?” Merlin asks.

You think it over, starting from the top. “Well, there’s a zoo. Inside the zoo is a building. And inside that building is a cage.”

“And inside the cage is our friendly boar. Exactly! How about if I add a line like this?”

```
<zoo>
  <building>
    <cage>
      <boar></boar>
    </cage>
  </building>
</zoo>
```

You look at the new `<cage>` element. “You’ve added another cage inside the building, but it’s empty.”

“Bingo! One more thing. In these examples the boar has always been in a cage, but there’s never been anything inside the boar. Sometimes, people cheat when this happens.”

“They cheat?”

“When an element is empty—in other words, there’s absolutely nothing inside it, not text or another element—they sometimes leave out the end tag. So that means they might use a `<boar>` without adding a `</boar>` to round things off.”

```
<cage>
  <boar>
</cage>
```

“This gets a bit confusing, and wizards love to argue about it. Sometimes it’s completely against the rules to leave out the end tag. Other times it works, but it’s frowned on, and they won’t invite you to any of the good parties if you do it. And sometimes people *expect* you to use this shortcut. But that’s a matter for another day.”

MARKUP: THE MAGICIAN'S LANGUAGE

You notice that the sun is getting lower in the sky. The giant boulder casts a long shadow that reaches almost to your toes. Even though Merlin hasn't said anything, you know instinctively that his lessons are over.

"It's time to climb down this hill and head back to the clearing," Merlin says.

"Wait!" you blurt out.

"You don't understand?" Merlin says with dismay.

I understand the lessons—the rocks and the tags and the cranky boars—but you haven't explained *why* I need to know this. If everything you told me is true, I'm going to be meeting a hero-chopping madman in a castle, and I don't see how a bunch of pointy brackets is going to help me!"

"Yes, I see your point. Allow me to explain. What you've been learning here are the basic rules of *markup*, as it's known in your world, or magic, as we wizards prefer to call it. There are thousands of markup languages in the world, and all of them have their own types of elements. Today we talked about `<cage>` and `<boar>` and `<zoo>`, but tomorrow you'll be on to something else." Merlin leans closer, and you could swear you see a mischievous twinkle in his eye. "Here's the nice bit. Every markup language plays by the same rules. Learn those rules and you can master them all."

"But what language am I meant to use?"

Merlin straightens. "That's enough for now," he says abruptly. "You're going to need a little more patience, unfortunately. Tomorrow, on your way to the castle, you'll meet

a friend of mine who can hopefully set you straight. But now it's time for us both to get some rest.”

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THE OVERGROWN GARDEN

You spend the night in the forest clearing. Merlin's magic has woven a bed out of forest mosses, and it's terrifically uncomfortable. You toss and turn for hours before the light of dawn finally streaks across the sky.

When you get up, you see that Merlin is already awake and pacing at the edge of the clearing.

"Ah, good to see you're an early riser," he says when he notices you. "No time like the present to get up, look around, smell the roses. Could be your last day on earth, but no reason to let that ruin a good sunrise, hmm?"

Finding this far from reassuring, you decide to ask Merlin a question. "When are you taking me to the castle?"

"Well, it's not so simple. You see, you aren't ready yet."

“So you’re going to keep training me?” you ask hopefully.

“No, I’m going to do something better. I’m going to send you to get a *magical artefact*. Every hero needs one of those.”

“Like an enchanted sword or something?”

Merlin frowns. “I had one of those once. Kept it stored it very securely in a rock, but that didn’t last. No, this is a different sort of artefact, and you’ll need to go and fetch it on your own.”

“Well, where is it?” you ask.

“You must look for my friend Crystal—she can help you out. You’ll find her in the royal gardens by the castle. But...” Merlin trails off.

“What?”

“It’s not going to be easy. When the king closed the castle, a strange enchantment fell over the gardens. They... aren’t the same any more. You’ll see what I mean when you get there.”

The situation is sounding worse by the minute. “It can’t be that bad, is it?” you ask timidly.

“Best not to think too much about it,” Merlin answers cheerfully. “Just know that to get through the royal garden, you’ll need to pass a test.”

“And if I fail it?” you ask, with a sinking feeling.

“Let’s just say you won’t need to worry about the mad king anymore.”

• • •

When you arrive at the garden, you see what Merlin means. The garden in no way resembles the neatly manicured hedges and flower arrangements you expect. Instead, you see a wild thicket of twisting tree branches, vines, and thorns. Even the grand metal gate, its doors slightly ajar, has been swallowed in a cloud of ivy.

“What happened?” you ask Merlin, but when you turn to hear his answer you realize that he has already left. There’s nothing for you to do but push yourself through the gap in the gate and enter the garden.

Going into this wilderness doesn’t seem like a terribly good idea. But standing outside, alone and lost, doesn’t seem much better. So you decide to press ahead along the tangled garden paths. The space is narrow, and you feel as though the twisted branches are closing behind you as you walk, like someone drawing a curtain closed.



The way back seems to close behind you

Just when you think things can’t get any creepier, you start to hear an odd chattering sound. It’s as though there are small children whispering in the underbrush.

Then, it happens.

“You should not have come here,” announces a shrill voice.

“Who said that?” You look around, but see nothing except the green leafy walls pressing in around you. Is it your imagination, or are the branches slowly creeping closer?

“The gardens are not fit for non-vegetal creatures!” the voice adds in a squeak.

“I—I mean your plants no harm!” you call, sounding more than a little ridiculous to yourself. “I’m looking for someone.”

There’s a loud rustle and suddenly you find yourself face to face with a childlike garden statue.



You weren't expecting to converse with a garden ornament

“You’re an ornament!” you blurt out in astonishment.

“Rudeness is not necessary,” the ornament squeaks back. “When the king went off his rocker, his magic escaped his control. And when magic is free—*truly* free—it runs like a wild wave over the land. It flows like water into dark places, and causes no end of mischief. Here in the garden, the plants began to move and think. *We* began to move and think.”

“That’s all sounds very nice for you, but perhaps you can tell me where to find my friend?”

The chattering in the bushes resumes, but now it sounds more urgent.

“You misunderstand us. This garden is no place for human folk.”

A gnarled branch suddenly jerks down in front of you, like a twisted arm reaching for something. A thorny vine slides forward across the ground, winding closer to your foot. And for the first time, you feel the sinister energy lurking in the deep green shadows.

“Wait!” you shout. “Merlin sent me here!”

The twisted branch pauses before your face. “Do you have magic?”

“Yes?”

“That is welcome news. Here in the garden we have a problem. A problem that needs magic. Can you solve it for us?”

You suddenly realize that it would be a very, very bad idea to turn down the friendly-faced garden ornament.

“I’ll certainly try!”

“If you can help us solve our problem, we will let you pass through the garden.”

“But if I can’t?”

The garden ornament narrows its sunshiny eyes. “Then you’ll make good compost.”

THE LEAKING FLOWERPOT

With an enormous creaking sound, a gnarled branch unfurls in front of you. Wrapped inside is a modest-looking flowerpot with a wilted rose plant inside.

“The is Rosetta. We water her every day,” the ornament tells you. “But she is dying.”

You look at the small flowerpot cradled in the branches. The rose plant is lying limply in the dirt.

“The others believe that the problem is in the magic. They think we might have made a mistake. But only a true wizard can tell.”

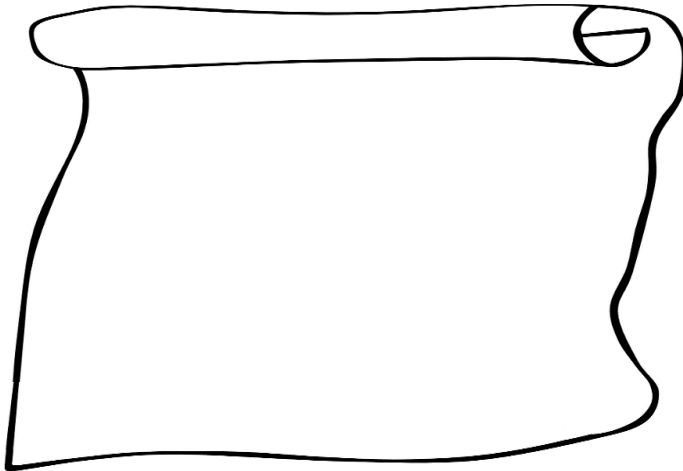
As the ornament speaks, a page of tattered paper appears in the air in front of you. It has glowing letters, with the same sort of markup that Merlin showed you on the mountain:

```
<garden>
  <flowerpot>
    <dirt></dirt>
    <rose>
  </flowerpot>
</rose>
</garden>
```

You stare at it for a while. Something is wrong here. The ornament frowns icily, and begins plucking petals off her neck, one at a time.

Then you see it. “I think I know what’s wrong!”

Fix the spell by rewriting it here, without the mistake:



“That should do it!”

You put down your pencil and turn to face the creepy ornament.

```
<garden>
  <flowerpot>
    <dirt></dirt>
    <rose>
      </rose>
    </flowerpot>
  </garden>
```

“The problem was with the nesting,” you explain. “I noticed that the `<rose>` start tag was inside the `<flowerpot>` element, but the `</rose>` end tag was *outside*. In other words, the rose wasn’t really all the way in the flowerpot, so it wasn’t getting watered.”

You glance at the pot and see that the rose plant is already perking up.

“Impressive,” the ornament sniffs. “I suppose now you want to meet Crystal.”

“How did you know?” you ask in surprise.

“Many people come looking for Crystal’s magic. But she chooses whom she meets.”

“Well, how can I ask her for a meeting?”

The sky dims, as though a cloud were passing in front of the sun. But when you look up, you realize that it’s the branches of an ominous oak tree, stretching its crooked fingers into the sky.

“If you’d like to meet with Crystal, you must prepare a message for her,” the ornament says sternly. “We will bring her the message. You will wait in the garden for her decision.”