

IMY 210

Unit Assignment 3: XSLT

During this assignment you will be creating a **XSLT stylesheet documents (a3.xsl)** to **style the provided XML document (character.xml)**. The assignment will not only test your ability to create a stylesheet document but also your understanding of the XSLT/XPath and their implementations.

Create a style sheet, **a3.xsl**, to transform the data in **character.xml** into an HTML output.

Important!

- Make frequent backups of your working files in different locations.
- Use a text editor (e.g. Notepad++) to complete this assignment.
- This is an individual assignment.
- **In terms of the class notes, the scope of this assignment is unit 2, Themes 4 - 5.**

Warning!

- If your final XSLT file is **not well-formed**, you will receive 0 for this assignment. If a piece of code is causing well-formedness problems, comment it out.
- **Your style sheet must be data-agnostic. In other words, it must work on any XML source with the same tag set, regardless of the data.**
- 20% of this assignment's mark go towards styling. Spend some time making your assignment presentable.

Provided Files

- **build.xml**: An XML file that describes a Diablo 3 Demon Hunter character.
- **image.zip**: All the image you could possibly need. Do **not** change the image names. Do **not** re-upload this zip file. Do **not** change the directory of the images.

Scenario


- You received an **XML file that needed to be transformed into HTML documents.**
- Rather than creating each HTML from scratch you decided to create an XSL stylesheet to style all XML document of the same format.
- This way you reduce the work of having to input the data directly into a database and use the validated XML file directly from the providers.

Task

- Include a **link to the URL** stored in the **attribute source** as an **image**.
- In the **appropriate section of the heading**, the style sheet must output the **name** of the build. **Transform the name to uppercase.**
- Add the text **"Last updated on"** followed by the **update**, and **creator** from the xml.
- Add the text **"Tag:"** followed by **all tags from the xml document that are not "outdated"**
- The **level required** value is **the highest level requirement** retrieved from the document. This value should display the highest **level** element within a character when looking at **skills** and **items**.
- **To work out the average item level, use only the requirement level of only items and work out the average, the result must be rounded up.**
- **Add the text "Created by" followed by your name, student number and the date at the end of the document.**

Print out the data in the following format:

- Create 4 headers namely:
 - Paragon Priorities
 - Skills
 - Gear
 - Kanai's Cube



DEMON HUNTER RAPID FIRE BUILD WITH LOD

Last updated on February 30, 2000 by Deadset

Tags: top-tier, solo, gr-pushing

Level required for this build: 70 Average item level: 40

Paragon Priorities

Skills

Gear













Kanai's Cube





Created by Daddy Long Legs (12345678) on xx Month xxxx

- Under **Paragon Priorities** section:
 - Include a table with four columns to store information for each of the paragon elements.
 - For each of the paragon element list all the priority element under them, in ascending @weight order.

Core	Offense	Defense	Utility
1. Movement Speed	1. Cooldown Reduction	1. All Resistance	1. Area Damage
2. Dexterity	2. Critical Hit Damage	2. Life %	2. Life on Hit
3. Maximum Hatred	3. Critical Hit Chance	3. Armor	3. Resource Cost Reduction
4. Vitality	4. Attack Speed	4. Life Regeneration	4. Gold Find



- Under **Skills** section:
 - Create a template to match a skill element.
 - The template should display all the given information of that skill.
 - Display the active skills in two rows.
 - In row one, apply the template to all odd-numbered position active skills and sort them alphabetically.
 - In row two, apply the template to all even-numbered position active skills and sort them alphabetically.
 - Display passive skills in a single row.
 - For each of the passive skills, display all given information and an image of the skill. Style the layout different from that of the active skills.
 - Sort the passive skills according to the level requirement in descending order.

Active Skills		
 Rapid Fire 20 - Hatred Rapidly fire for 685% weapon damage as Physical.	 Smoke Screen 14 - discipline Vanish behind a wall of smoke, becoming momentarily invisible for 1 second.	 Vengeance 90 - Cooldown Turn into the physical embodiment of Vengeance for 20 seconds. Side Guns: Gain 4 additional piercing shots for 60% weapon damage each on every attack. Homing Rockets: Shoot 2 rockets at nearby enemies for 80% weapon damage each on every attack. Vengeance: Gain 40% increased damage.
 Bombardment Rapidly fire grenades that explode for 545% weapon damage as Fire to all enemies within a 8 yard radius.	 Vanishing Powder Remove the Discipline cost but increase the cooldown to 6 seconds.	 Side Cannons Instead of Homing Rockets, the side guns are powered up into slower-firing cannons that deal 225% weapon damage and heal you for 3.0% of maximum Life per enemy hit.
 Shadow Power 14 - discipline Draw in the power of the shadows, gaining 26,821 Life per Hit for 5 seconds. Life per Hit gained is increased by 25% of your Life per Kill.	 Fan of Knives 10 - Cooldown Throw knives out in a spiral around you, dealing 620% weapon damage to all enemies within 20 yards. Your knives will also Slow the movement of enemies by 60% for 1 second.	 Companion 30 - Cooldown Active: Your raven deals an additional 500% damage on its next attack. Passive: Summons a raven companion that pecks at enemies for 100% of your weapon damage as Physical
 Gloom Reduce damage taken by 35% while Shadow Power is active.	 Bladed Armor Gain 40% additional armor for 6 seconds. Fan of Knives' damage turns into Cold.	 Wolf Companion Active: Your wolf howls, granting you and your allies within 60 yards 15% increased damage for 10 seconds. Passive: Summons a wolf companion that attacks enemies in front of him for 150% of your weapon damage as Physical.

Passive Skills			
 Ambush You deal 40% additional damage to enemies above 75% health.	 Grenadier Increase the damage of grenades by 10%. Increase the explosion size of grenades by 20%. Upon death, you drop a giant grenade that explodes for 1000% weapon damage as Fire.	 Numbing Traps Enemies you Slow, Chill, or hit with Fan of Knives, Spike Trap, Caltrops, Grenades, and Sentry fire have their damage reduced by 25% for 5 seconds.	 Cull the Weak Increase damage against Slowed or Chilled enemies by 20%.

▪ Under **Gear** section:




- Create a **template** to **match an item element**.
- The template will display the following:
 - The item's **name** with the **set @type** in brackets. **Colour this text according to the rarity.**
 - Under the name, display the **text of the @set from rarity** followed by the **set**. **Colour this text according to the rarity.**
 - **Display the image** in a **colour box according to the rarity.**
 - **If the item has an attack or defence element, display all these data** as the screenshot provided.
 - Finish each item by displaying the **remaining primary and secondary stats**, **leave blank if the item has no primary or secondary stat.**

Cindercoat (Torso) Legendary Chest Armor  Level requirement: 34 Armor 285 - 321 =====Primary Stats===== <ul style="list-style-type: none"> • Fire skills deal [15 - 20]% more damage. =====Secondary Stats===== <ul style="list-style-type: none"> • Reduces the resource cost of Fire skills by 27%. [23 - 30]% • One of 3 Magic Properties (varies) • +[416 - 500] Strength/Dexterity 	Dawn (1-Hand Weapon) Legendary Hand Crossbow  Level requirement: 60 DPS 258.4 DMG 48-275 APS 1.60 =====Primary Stats===== <ul style="list-style-type: none"> • +[858 - 1049]-[1028 - 1304] Holy Damage • +[626 - 750] Dexterity =====Secondary Stats===== <ul style="list-style-type: none"> • Reduce the cooldown of Vengeance by 62%. (Demon Hunter Only) [50 - 65]% • +3 Random Magic Properties
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- Display twelve items in a 3x4 grid.
- Sort the items by its set
- In row one, apply the template to the first three item.
- In row two, apply the template to items in position 4 - 6.
- In row three, apply the template to items in position 7 - 9.
- In row four, apply the template to all items in the last 3 positions.

just to confuse us???

- Under **Kanai's Cube** section:
 - Apply the item template created in the section prior to all items in this category
 - Sort the items according to its name.

Kanai's Cube		
Elusive Ring (Finger) Legendary Ring  Level requirement: 60 =====Primary Stats===== <ul style="list-style-type: none"> • Critical Hit Chance Increased by [4.5 - 6.0]% =====Secondary Stats===== <ul style="list-style-type: none"> • After casting Shadow Power, Smoke Screen, or Vault, take 50% reduced damage for 8 seconds. (Demon Hunter Only) [50 - 60]% • One of 3 Magic Properties: • +[416 - 500] Strength/Dexterity /Intelligence • +3 Random Magic Properties 	Stone Gauntlets (Hands) Legendary Glove  Level requirement: 30 Armor 192 - 209 =====Secondary Stats===== <ul style="list-style-type: none"> • Getting hit increases your armor by 50%, but reduces your movement speed by 15% and attack speed by 20%. This effect stacks up to 5 times. • One of 4 Magic Properties • +[626 - 750] Strength/Dexterity /Intelligence • [10.0 - 20.0]% Chance to Immobilize on Hit • +4 Random Magic Properties 	Wojahnni (2-Hand Weapon) Legendary Crossbow  Level requirement: 70 DPS 948.2 DMG 779-945 APS 1.10 =====Primary Stats===== <ul style="list-style-type: none"> • +[626 - 750] Dexterity =====Secondary Stats===== <ul style="list-style-type: none"> • Rapid Fire increasingly deals 95% increased damage while channeling. Stacks up to 30 times. (Demon Hunter Only) [75 - 100]% • One of 7 Magic Properties • +[981 - 1199]-[1175 - 1490] Poison/Cold/Lightning/Physical /Holy/Arcane/Fire • +3 Random Magic Properties

- Style your result to your liking, but keep in mind basic design principles (yellow on white is a no-go). Add relevant titles to the values you are displaying. You are welcome to use any css function if you can show all the relevant information (refer to provided screenshots)
Note: Do not copy the styling as it is from the example documentation! Style the document accordingly to how you see fit

Submission

- Double-check that you adhered to the **Warning** statements at the start of this specification.
- Compress **a3.xsl** and other **relevant files** (css, images, etc.) into an archive named **a3.zip**. Do **not** re-upload the images provided. You should include all additional images you used, but keep in mind your upload should not exceed **1MB**. These images should be in the **images** folder.
- Make a final backup of all your files and keep them in a safe place.
- Submit your ZIP file to link provided on clickUP.