

CaptureAge Recruitment: UI/UX (Frontend) Engineer Test

Congratulations on making it to this stage of our recruitment and thank you for your continued interest in joining CaptureAge!

Please take your time to read through the instructions carefully before submitting your solution.

The recommended amount of time for this test is 2-4 hours. Try to keep your work within the set timeframe, but feel open to communicate if you need more time.

Please send us your solution in the form of a public GitHub repository linked in an email within a week from when you received these instructions. Include a copy of this PDF file in your repository as well.

If you have any questions, just let us know - Good luck and have fun building your tool!

Task

Hello! Here at CaptureAge, we're designing a totally original and unique Table Top Roleplaying Game called "**Dragons and Dungeons**" and we need your help. We're looking for you to create a simple yet functional frontend prototype of a character selection screen for our game. This screen will allow users to select pre-defined characters.

General Requirements:

1. **A Repository:** Please share the repository you used so we can see and run your work
2. **A README:** That explains how to build the project, what dependencies are necessary, and how to use the program.
3. **A Runnable Program:** The program needs to be able to run on a Windows machine (Ideally able to run in a [Windows Sandbox](#)) or on the Web.

Character Screen Requirements:

1. **Basic Character Selection:** A left side panel that shows all the characters, their names, and character portraits. The characters can be selected and shown in the preview window.
2. **Preview:** Provide a basic preview (static image) of the character, displaying selected race, class, and their respective attributes.
3. **Play Button:** Provide a basic play button and position accordingly
4. **Stretch Goals (optional):** If you met the previous requirements, feel free to add any other features you think would be cool! Such as:
 - a. **Create a character:** The ability to add a character to the selection screen and persist them in game.
 - b. **Animations:** Add a little flair to the character select screen with animations
 - c. **Sound Effects:** Immerse the player in the UI with feedback during selection, ambient music, etc.
 - d. **Something you want to add!**

UI/UX Team Requirements:

- **Resolution:** The builder should fit within a 1920x1080 resolution and scale appropriately to differing resolutions.
- **Portrait, Race, and Class Icons:** Use square icons with dimensions of 64x64 pixels for displaying race and class options.
- **Character Preview:** Keep the character preview window small and simple, with dimensions of 400x800 pixels to maintain a clean and uncluttered interface.
- **Buttons and Controls:** Design buttons and interactive elements with touch-friendly sizes, aiming for a minimum width and height of 55 pixels to ensure ease of use on both desktop and mobile devices.
- **Fonts:** Opt for legible and scalable fonts, with a recommended size of 18 pixels for body text and 36 pixels for headings to ensure readability across different screen sizes.
- **Guideline Reference:** Use the [Xbox Accessibility Guidelines](#) to help clarify any other features you have questions on.

You're free to use any frontend technologies you're comfortable with. We understand the time constraints, so focus on delivering a functional prototype that meets the above requirements.

Feel free to reach out if you have any questions or need clarification on the specifications.

Best of luck, and happy coding!

Character Spec

Below is the character specifications. Use this to inform the data you use to visualize the character selection screen. **IMPORTANT: this data should be a static representation. There is no need to create all the business logic for the prototype. You can use your favorite way to roll dice to create the basic data set.**

Name: All characters need a name!

Ability Scores:

- STR: Strength
- INT: Intelligence
- WIS: Wisdom
- DEX: Dexterity
- CON: Constitution
- CHA: Charisma

All ability scores are chosen by rolling 3 6 sided dice (3d6) and adding them together, for example, if you rolled 5, 4, 3 for STR then the final stat would be 12.

Ability Scores should be shown both with and without any race modifiers

Race: Chosen from the following table, making sure the minimum stat requirements are met

Race	Minimum Stat	Modifier	Racial Ability	Allowed Classes
Dwarf	CON 9	-1 CHA, +1 CON	Infravision	Bard, Cleric, Fighter, Thief
Elf	INT 9	-1 CON, +1 DEX	Detect Secret Doors	Cleric, Druid, Fighter, Wizard, Ranger, Thief
Gnome	CON 9, INT 9	None	Defensive Bonus	Cleric, Fighter, Thief, Wizard
Halfling	CON 9, DEX 9	+1 DEX, -1 STR	Initiative Bonus	Bard, Druid, Fighter, Thief
Human	None	None	None	All

Class: Select a class, and display the prime stat

Class	Hit Dice	Prime Stat
Bard	1d6	CHA
Cleric	1d6	WIS
Druid	1d6	WIS

Fighter	1d8	STR
Ranger	1d8	STR
Thief	1d4	DEX
Wizard	1d4	INT

Hit Points: Roll the class hit dice and then add your constitution modifier. Minimum 1. The CON mod is as follows:

CON	MOD
3	-3
4-5	-2
6-8	-1
9-12	None
13-15	+1
16-17	+2
18	+3

Starting Gold: 3d6 * 10