

Thank you for the opportunity to interview.

I'm a final-year Software Engineering undergraduate at Sabaragamuwa University of Sri Lanka, passionate about frontend development, teamwork, and learning new technologies.

I've worked on several academic and personal projects using HTML, CSS, JavaScript, React, Next.js, and Tailwind CSS. I also have experience with GitHub for version control and team collaboration.

One of my key projects is a fully responsive web application called De Silva Wine Store, built using the MERN stack and Tailwind CSS. I contributed mainly to the frontend development.

Another project I contributed to is Beast Buddy, an animal rescue web platform that supports animal welfare. I worked on both the frontend and backend, focusing on creating clean, user-friendly interfaces with HTML, CSS, and JavaScript.

Outside academics, I've been active in volunteering, which has helped me build strong communication and leadership skills.

If I get this opportunity, I'm excited to learn from your team and become a better frontend developer.

## **Differences between var, let, and const in JavaScript:**

**var**: Function-scoped, can be redeclared and updated, hoisted.

**let**: Block-scoped, can be updated but not redeclared, safer than **var**.

**const**: Block-scoped, cannot be updated or redeclared, must be initialized.

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## **Common Git commands**

`git init` — Initialize a new Git repository

`git clone <url>` — Copy a remote repo to your local machine

`git status` — Check current changes and status

`git add <file>` — Stage file(s) for commit

`git commit -m "message"` — Save changes with a message

`git push` — Upload local commits to remote repo

`git pull` — Download and merge changes from remote repo

`git branch` — List branches

`git checkout <branch>` — Switch to a branch

`git merge <branch>` — Merge another branch into current branch

`git log` — Show commit history

`git fetch` = get changes (download only)

`git pull` = get changes + merge them automatically

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## Why use .env file?

.**env** file is used to store environment variables like API keys, database URLs, and secret tokens **separately from your code**.

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## Difference between HTTP and HTTPS

HTTP(HyperText Transfer Protocol): Data is sent unencrypted, less secure, uses port 80.

HTTPS(HyperText Transfer Protocol Secure) : Data is encrypted with SSL/TLS, more secure, uses port 443.

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## What are react hooks?

**React Hooks** are special functions that let you use React features like state and lifecycle in **functional components** (without writing class components).

Common hooks:

- `useState` — for state management
- `useEffect` — for side effects like data fetching or subscriptions
- `useContext` — to access context data

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## How react DOM works ?

React uses a Virtual DOM, a lightweight copy of the real DOM.

When something changes:

1. React updates the Virtual DOM first.

2. It compares (diffs) the old and new Virtual DOM.
3. Then, it updates only the changed parts in the real DOM — making it fast and efficient.

This process is called reconciliation.

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git fetch → Gets the latest changes from remote, but doesn't update your working files.

git pull → Gets the latest changes and automatically merges them into our code.