

1. WHAT IS FULL STACK DEVELOPMENT?

Definition:

A full stack developer is someone who can build an entire website from start to finish.

"Full stack" means they know both the front-end (what users see) and the back end (where data is stored).

Two Parts:

1. FRONT-END (Client-Side)

- What the user sees in their browser
- Built with: HTML, CSS, JavaScript
- Example: When you type in a form, the form appears on your screen (front-end)
- Happens on: Your computer, in your browser

2. BACK-END (Server-Side)

- Where information is stored
- Built with: PHP, Python, Node.js, Java
- Example: When you submit a form, the data goes to a server and is saved in a database
- Happens on: Company's server, in the cloud

How They Work Together:

- User fills out a form on the website (FRONT-END)
- User clicks "Submit" button (FRONT-END event)
- JavaScript sends the data to the server (COMMUNICATION)
- Server receives it, checks if it's correct (BACK-END logic)
- Server saves it in database (BACK-END storage)
- Server sends back a "Success!" message
- User sees "Success!" on their screen (FRONT-END display)

For Agriculture:

- A farmer uses a website to register and buy fertilizer (FRONT-END)
- The website stores their order in a database (BACK-END)
- The company can track and deliver their order (BACK-END process)
- The farmer gets an email confirmation (BACK-END to FRONT-END)

Why Full Stack Skills Matter:

- You can build complete solutions
- You understand how everything works together
- You can fix problems anywhere in the application
- You're more valuable as a developer