Development Roles:

Web Front-End:

making html, css, and js of the site. Work with product managers and designers to create and implement the visual elements. Implement interactive JS components and will write templating and view code.

Web Back-End:

making business logic/DB-interacting part of the site. Work with product managers to learn product requirements and write an interface for the front-end developers to use for implementing the app. Implement logic and data models.

Web Full-Stack:

Combines front-end and back-end

Mobile Developers:

Most web sites have a mobile app too. Like a front-end developer, but writes iOS or android code instead of HTML, CSS, and JS.

Infrastructure:

write re-usable and performant framework, database, or logging tools for other devs to use.

like a back-end’s back-end

might develop specialized search engine technology or tools to link datastores and databases or develop front-end frameworks or work on an analytics pipeline to calculate usage metrics for the site.

Operations:

Deals with making sure the website is available and speedy. Manages production servers and monitors them for issues. Develops code to assist in running servers in the organization; each organization is slightly different, so require custom code. Industry is moving in the direction of Ops folks just writing tooling and actually delegating management to core developers. Often times “on call” and might have to wake up at 3 A.M. if computers catch on fire. That’s now often being delegated to other developers

Developer Operations / DevOps:

Deals with writing tools for other developers to be productive. Writes source code, code review, testing, staging environment, and production deployment tooling.

Database Administrator / DBA:

Deals with making sure the database use is performant. Helps other developers with interacting with the database in a reasonable way. Often is not an expert in programming, but an expert in DB design and SQL use.

Security:

Keeps the site secure. Comes up with tooling and conventions to prevent other developers from introducing security issues.

Product Manager:

Not a development role, but so closely related, I’ll mention it here. Deals with planning and design of the features of the web product. Will prioritize features vs. debugging vs. refactoring for developers. Has a give-and-take with them about what features are worthwhile vs. east to implement. Usually not technically the manager of developers.

Engineering Manager:

Technical manager of developers. Does all the usual manager stuff: 1-on-1’s, performance reviews, etc.

Data Scientist:

Usually not a proper “development” role. Does ad-hoc programming and analysis for product managers and business folks. Sometimes pursues new product features, sometimes just helps the company plan. Works closely with infrastructure or backend engineers to get data or produce a product.

**Types of Companies:**

Teck Companies:

Some companies brand themselves as tech companies. They are generally places whose main product is a piece of software. Facebook, Urban Airship, Microsoft, etc.

Advantages:

Devs are top of the totem pole; almost always work on public products used by hundreds of thousands of people; generally have a culture of sharing code; perks

Disadvantages:

Longer hours / no set hours; sometimes unprofessional or poor work-life separation

Non-Tech Companies:

Most developers work at non-tech companies.

Advantages:

More professional company culture; can learn non-technical or non-programming feats; work on internal tools with slower-moving requirements

Disadvantages:

More bureaucracy; less work visibility; more protective of code and property; might be under-funded or staffed

Startup:

Advantages:

Get to guide culture and tech from start

independence

usually more stock compensation

disadvantages:

lost of breadth

self-motivation

no teachers

lower salaries

large institutions:

advantages:

surrounded by teachers and guidance

great for learning established techniques

usually higher salaries

disadvantages:

hard to change culture or technical direction

less stock compensation