

FRONT-END SOFTWARE DEVELOPMENT

ECC 811 – SOFTWARE ENGINEERING

Tuesday, May 9, 2023

WHAT IS FRONT-END SOFTWARE DEVELOPMENT?

1. Front-end software development creates websites and applications using web languages such as
 1. Hypertext markup Language (HTML)
 2. Cascaded Style Sheets (CSS)
 3. JavaScript
2. **Front-end software development** allows users to access and interact with the site or app.
3. When you visit a website, the design elements you see on your user terminal were created by a front-end developer.

FRONT-END VS BACK-END SOFTWARE /01

USER TERMINAL



SERVER



Front End

- Markup and web languages such as HTML, CSS and Javascript
- Asynchronous requests and Ajax
- Specialized web editing software
- Image editing
- Accessibility
- Cross-browser issues
- Search engine optimisation

Back End

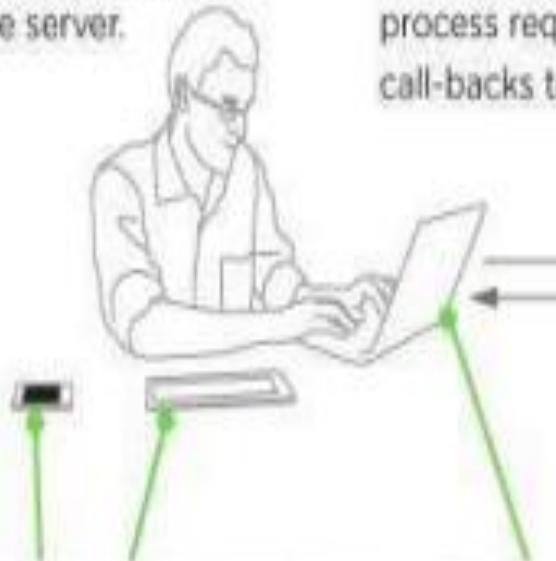
- Programming and scripting such as Python, Ruby and/or Perl
- Server architecture
- Database administration
- Scalability
- Security
- Data transformation
- Backup

FRONT-END SOFTWARE TERMINOLOGY

1. **Web browser** is software used to retrieve, present, and traverse information on the WWW. Examples: Chrome, Internet Explorer, Firefox, Safari, etc.
2. **Headless browsers** are a web browser without a graphical user interface used for functional testing, scraping, unit testing, etc.). Example: [Phantom JS](#), slimerjs.
3. **WebView** is an embeddable browser that a native application can use to display web content. It excludes advanced features like navigational control and address bar.

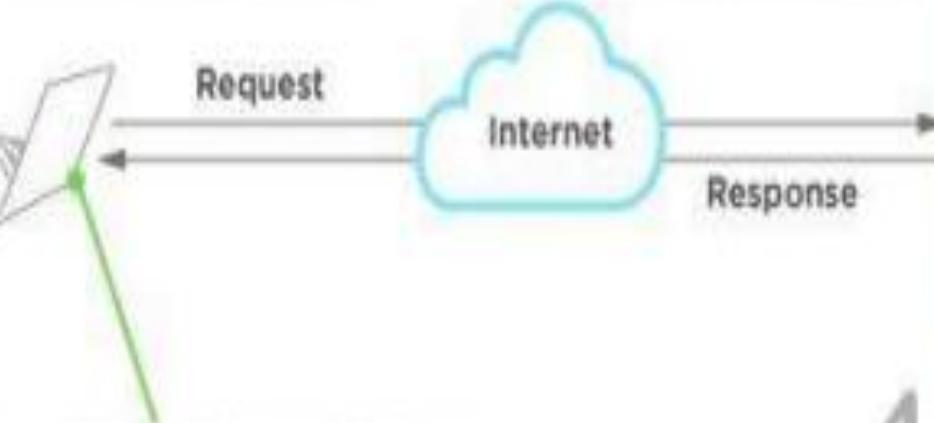
FRONT-END VS BACK-END SOFTWARE /02

1 A site is loaded in a browser from the server.



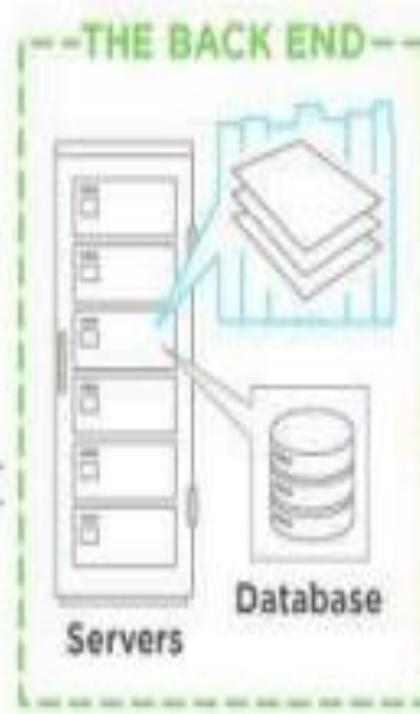
Responsive front-end design allows a site to adapt to a user's device.

2 **Client-side scripts** Run in the browser and process requests without call-backs to the server



Everything a user sees in the browser is a mix of **HTML**, **CSS**, and **JavaScript**.

3 When a call to the database **is** required JavaScript and AJAX send requests to the back end.



4 The **back-end server-side scripts** process the request, pull what they need from the database then send it back.

5 **Server-side scripts** process the data, then update the site—populating drop-down menus, loading products to a page, updating a user profile, and more.

FRONT-END JOB TITLES

1. **Front-End Developer/Engineer** (Front-End Web Developer/Engineer, Client-Side Developer/Engineer, Front-End Software Developer/Engineer or UI Engineer) CSS/HTML Developer
2. **Front-End JavaScript Developer**
3. **Front-End Web Designer**

FRONT-END SOFTWARE DEVELOPER

The role

- Client-side development
- Test website for usability
- Ensure browser compatibility

Background

- Computer science or related IT degree
- Start without official education possible
- Previous experience a plus

Skills

- HTML, CSS, JavaScript
- Frameworks: Bootstrap, AngularJS, ReactJS, Ember
- Responsive design

Salary

Junior: \$ 56,000
Average: \$ 78,000
Top: \$ 111,000

People also ask (May 2023)

How much is front-end developer paid in Kenya?

The median annual salary for a remote Frontend Developer in Kenya is \$46,897.