Web-Technologies Booklet

1. **HTML:** Stands for Hyper Text Markup Language. It specifies the structure of a website.
2. **CSS:** Stands for Cascading Style Sheets. It describes how HTML elements are to be displayed on screen.
3. **JavaScript:** A scripting language that enables interactivity on web pages.
4. **DOM:** Stands for Document Object Model. It represents the structured content of a web page as objects.
5. **API:** Stands for Application Programming Interface. It defines how software components should interact.
6. **HTTP:** Stands for Hypertext Transfer Protocol. It defines how messages are formatted and transmitted over the web.
7. **HTTPS:** Stands for Hypertext Transfer Protocol Secure. It encrypts data transmitted over HTTP to ensure security.
8. **URL:** Stands for Uniform Resource Locator. It is the address used to access resources on the web.
9. **DNS**: Stands for Domain Name System. It translates domain names to IP addresses.
10. **IP Address:** Stands for Internet Protocol Address. It identifies devices on a network.
11. **Responsive Design:** Design approach to create web pages that adjust to various screen sizes and orientations.
12. **MVC:** Stands for Model-View-Controller. A software design pattern separating data (Model), presentation (View), and application logic (Controller).
13. **AJAX:** Stands for Asynchronous JavaScript and XML. It enables asynchronous data retrieval from a server without refreshing the page.
14. **JSON:** Stands for JavaScript Object Notation. A lightweight data-interchange format.
15. **RESTful:** A design pattern for web services that uses HTTP requests to perform CRUD (Create, Read, Update, Delete) operations.
16. **Bootstrap:** A front-end framework for developing responsive and mobile-first websites.
17. **CMS:** Stands for Content Management System. It allows users to create, manage, and modify digital content.
18. **SEO:** Stands for Search Engine Optimization. It improves the visibility of a website in search engine results.
19. **Semantic HTML:** HTML tags that convey the meaning of their content to both the browser and developer.
20. **Git:** A version control system for tracking changes in source code during software development.
21. **GitHub:** A web-based platform for hosting and sharing Git repositories.
22. **SSL/TLS:** Stands for Secure Sockets Layer/Transport Layer Security. Protocols that encrypt data transmitted over the internet.
23. **Cookie:** Small pieces of data stored on the client's side to track and identify users.

24. **Session:** A period of time during which a user interacts with a web application.
25. **Web Server:** Software that serves web pages to users based on their requests.
26. **Responsive Images:** Images that scale appropriately based on the screen size and resolution.
27. **CDN:** Stands for Content Delivery Network. It distributes content to multiple servers globally to improve performance.
28. **Front-end:** The part of a website that users interact with directly.
29. **Back-end:** The part of a website that handles logic, database interactions, and server-side operations.
30. **API Endpoint:** A specific URL where an API can be accessed.
31. **Framework:** A pre-written code library that facilitates software development by providing reusable components and tools.
32. **Dependency Injection:** A design pattern where one object supplies the dependencies of another object.
33. **Progressive Web App (PWA):** A web application that uses modern web capabilities to deliver an app-like experience to users.
34. **Cross-platform:** Software that can run on multiple operating systems or platforms.
35. **Web Accessibility:** Designing websites and applications to be usable by people with disabilities.
36. **UI/UX:** Stands for User Interface/User Experience. It encompasses the look, feel, and usability of a website or application.
37. **Single Page Application (SPA):** A web application that loads a single HTML page and dynamically updates as the user interacts with it.
38. **Scalability:** The ability of a system to handle growing amounts of work or its potential to be enlarged to accommodate that growth.
39. **Web Socket:** A protocol providing full-duplex communication channels over a single TCP connection.
40. **Cross-site Scripting (XSS):** A security vulnerability where attackers inject malicious scripts into web pages viewed by other users.