**Agile Methodology**

Agile is a style of building software across teams that emphasizes fast, continuous, iterative builds that put the needs of the customer first. It also emphasizes team communication on a regular basis. Tasks are assigned in sprints, 2-4 week periods that focus on building or fixing features. At the end of that time period, groups meet in a *retro*, and discuss what worked and did not work during the sprint. Then the next sprint is planned based on what the team has learned, and continues on with the next iteration.

To learn more, check out the [Agile Manifesto](https://agilemanifesto.org/).

**Cyber Security**

Cybersecurity seems to be a shadow issue, often shoved behind layers of fast development, clean code, well-tested codebases, and fulfilling user’s needs quickly. But when it doesn’t work, it is almost always an epic failure that affects users and developers where it hurts the most. For this reason, it is important to develop with security in mind from the get-go.

**Client**

The *client* is the name for an end-users computer which grants them access to external resources stored on a server. Examples of a client are a web browser or a desktop email service.

**Server**

A *server* is a computer system that shares data and resources among end-user's specific *client*. For example, an end user could use a browser (client), such as Firefox, to tell the server to go get their email when they navigate to a webpage. The server is then responsible for retrieving the email the user has requested from the database, and returning the email to the client.

**Database**

A database is where information is stored and catalogued electronically. It is accessed via a server, which sends and retrieves data between a database and a client.

**Kerberos**

Kerberos uses cryptography (the practice of hiding information) to provide secure authentication between a client and the server.

**Encryption**

Encryption can be summed up as a way of scrambling data so only authorized parties can understand it. Developers or cyber security experts do this through using keys, certificates, external servers like Kerberos, and many other forms of data scrambling.

**Authorization & Authentication**

Authorization answers the question "what can you do?", and authentication answer the question "who are you?". Both of these questions are important to keep in mind as you develop more complex software so you can properly segment and store data with specific users.

**Recursion**

Recursion is a method of solving a problem where the solution depends on solutions to smaller instances of the same problem, ie solving the same problem over and over again in small chunks to find an overall solution. A real-world example of recursion are trees: each branch is a smaller, similar pattern of a tree in and of itself, and all together, the smaller branches form one large tree.

Sources:

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