1. Python module is a widely used library for making HTTP requests easily. JSON and XML are commonly used data formats for exchanging structured information. RESTful APIs are web services built on HTTP principles, offering simplicity and scalability but with trade-offs in flexibility and performance. It also supports authentication, sessions, cookies, timeouts, and automatic connection reuse. It also has various support features, such as TLS/SSL verification, connection timeouts and streaming downloads.

2. In my experience, I've used XML to create layouts in Android studio, its kind've like html that uses tags as well. XML simplifies data sharing, transport, platform changes and data availability. JSON is like python's dictionary function and uses syntax like JavaScript objects. This is main used to send, receive and store data.

XML -advantages	XML - disadvantages	JSON - Advantages	JSON - Disadvantages
Supports complex hierarches	Verbose and large files sizes	Human readable	Limited support for complex data
Self-descriptive with tags and attributes	Slower parsing and processing	lightweight	Not very suited for large datasets
Schema support	More complex syntax, harder for humans to read	Native support	No built-in schema enforcements
Widely adopted in enterprise and legacy systems	Overhead in bandwidth and storage	Ideal for web API's and mobile apps	Vulnerable to injection attacks.

3. REST (representation State Transfer) is an architectural style for building web services. RESTful API's use HTTP methods (GET, POST, PUT, DELETE) to interact with resources, typically represented in JSON or XML. Client sends requests and server responds with resources. Every request contains all necessary information.

Advantages	Disadvantages
Simple and widely understood	Limit support for complex transactions
Stateless design improves scalability	Overhead inn handling multiple requests for related data
Cacheable responses enhance performance	Less efficient for real-time communication compared to WebSocket's
Broad adoption with strong community support	Security must be carefully managed (e.g. authentication, data exposure)