

S-1

Terms :

- API
- Abstraction
- High Level Design
- Tools and Optimization

take-aways :

1. API :

- API stands for Application Programming Interface. In the context of APIs, the word Application refers to any software with a distinct function. Interface can be thought of as a contract of service between two applications. This contract defines how the two communicate with each other using requests and responses. Their API documentation contains information on how developers are to structure those requests and responses.
- APIs are mechanisms that enable two software components to communicate with each other using a set of definitions and protocols. For example, the weather bureau's software system contains daily weather data. The weather app on your phone “talks” to this system via APIs and shows you daily weather updates on your phone.
- information, source, destination, how to communicate

2. Abstraction :

- Abstraction is **used to hide background details or any unnecessary implementation about the data so that users only see the required information.**
- It is the concept so can be applicable on a layer of software, in programming languages, in designing systems and in thinking procedures.

3. High Level Design (HLD)

- High-level design (HLD) **explains the architecture that would be used to develop a system.** The architecture diagram provides an overview of an entire system, identifying the main components that would be developed for the product and their interfaces.
- This focuses on the abstract features of the complete software, or the components that are to be needed according to the requirement of the problem statement.

4. Tools and Optimizations

- While solving any real world problem, first focus should be on : what are some best tools that can be used to solve the problem or a particular part of the problem. After finding out that we need to primarily focus on the building of the solution using the tools

- After we have a basic prototype start working on the optimizations and things that are to be done to increase the efficiency of the solution, or the further requirements.