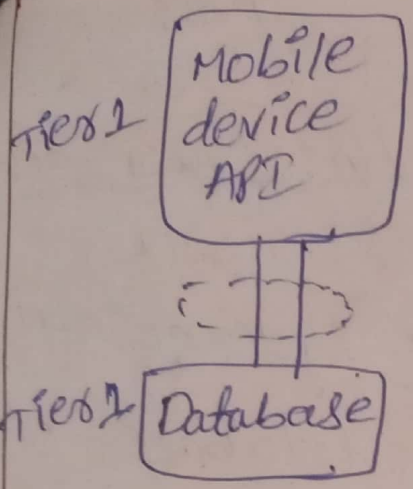
1) Hoarding techniques in database issue.

A Database is a collection of systematically stored records (or) information databases store data in a particular logical manner. A mobile device is not always connected to the server or a network neither does the device retrieve data from a server (or) network for each computation rather the device caches some specific data which may be required for future computations, during the interval in which the device is connect less to the server caching entails saving a copy of select data (or) a part of database from a connected system with large database. The catched data is hoarded in the mobile device database.

Database Hoarding :

Database hoarding may be done at the application tier itself. The following figure shows a simple architecture in which a mobile device API directly retrieves the data from a database. It also shows another simple architecture in which a mobile the data from a database through a program.



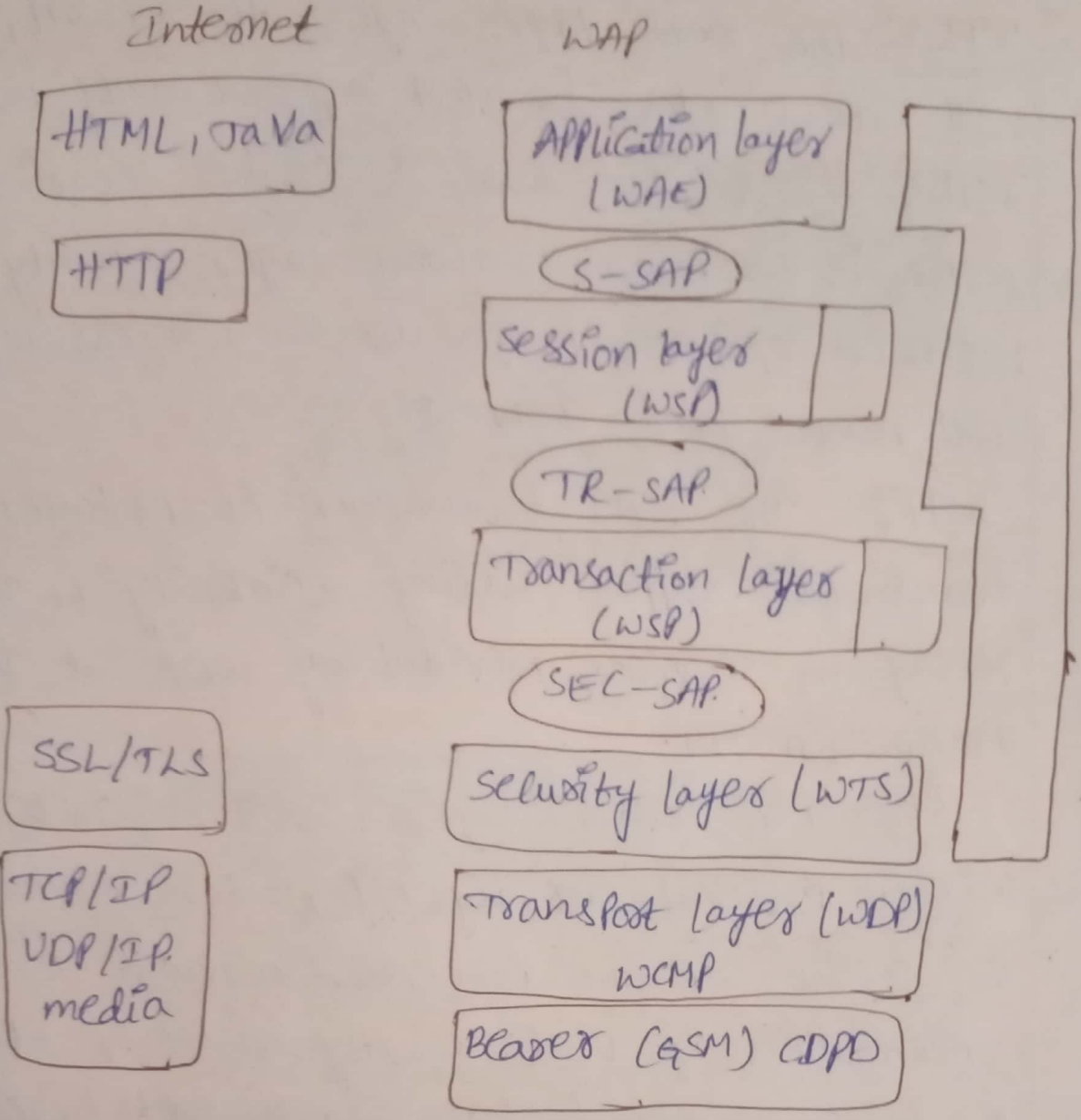
Mobile device database API: J2ME or BREW: XML database (or) other db and the catched dbs.

from remote server: Ds Application database on a mobile device.

2) Wireless Application Protocol (WAP)

- Wireless Application Protocol commonly known as WAP is used to enable the access of internet in the mobile phones (or) PDAS.
- An open global specifications that empowers mobile users with wireless devices to easily access and interact with internet information and services instantly.

The following figure gives an overview of the WAP architecture. Its Protocol and components and compares this architecture with the typical internet architecture. when using the world wide. The basis for transmission of data is formed by different bearer services. WAP does not specify bearer services, but uses existing data services and will integrate further services.



WAE comprises WML (wireless markup language) VML script, WTAT, etc.

WDP:- The WAP Datagram protocol (WDP) and the additional wireless control protocol (WCMP) is the transport layer that sends receives messages via any available bearer network including SMS, USSD, CSD, CDPD, the transport layer.

services access point (T-SAP):- is the common interface to be used by higher layers independent of the underlying network.

WTLS: The next higher layers, the security layer with its wireless transport layer security protocol WTLS offers its services at the security SAP. WTLS is based on transport layer security WTLS has been optimized for use in wireless networks with narrow band channels.

WTP: The WAP transaction (WTP) layer provides transaction support adding reliability to the datagram services provided by WDP at the transaction SAP.

WSP: The session layer with the wireless session protocol currently offers two services at the session-SAP one connection oriented and one connectionless. if used directly on top of WDP. A special service for browsing the web (WSP/B) has been defined that offers HTTP/1.1 functionality, long-lived session start and other feature needed for wireless mobile access to the web.

WAE: The Application layer with the wireless application environment offers a framework for the integration of different WWW and mobile telephony applications.