**Here’s a summary of the Java 8 Date and Time API (java.time package):**

**1. Core Classes**

* LocalDate – Date without time (e.g., 2025-07-24)
* LocalTime – Time without date (e.g., 14:30:00)
* LocalDateTime – Date and time (e.g., 2025-07-24T14:30:00)
* ZonedDateTime – Date and time with time zone
* Instant – Timestamp (machine time, UTC)
* Period – Amount of time in years, months, days
* Duration – Amount of time in seconds, nanoseconds

**2. Common Methods**

**Creation**

LocalDate.now();

LocalDate.of(2025, 7, 24);

LocalTime.now();

LocalDateTime.now();

ZonedDateTime.now();

Instant.now();

**Parsing & Formatting**

LocalDate.parse("2025-07-24");

DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd/MM/yyyy");

LocalDate.parse("24/07/2025", formatter);

date.format(formatter);

**Manipulation**

date.plusDays(5);

date.minusMonths(2);

date.withDayOfMonth(1);

time.plusHours(3);

**Comparison**

date.isBefore(otherDate);

date.isAfter(otherDate);

date.equals(otherDate);

**Period & Duration**

Period.between(date1, date2);

Duration.between(time1, time2);

**3. Time Zones**

ZoneId zone = ZoneId.of("Asia/Kolkata");

ZonedDateTime.now(zone);

**4. Legacy Conversion**

Date date = new Date();

Instant instant = date.toInstant();

LocalDateTime ldt = LocalDateTime.ofInstant(instant, ZoneId.systemDefault());

**Note:**  
Java 8 Date-Time API is immutable, thread-safe, and much improved over older java.util.Date and Calendar.