

# IT6601-Mobile Computing

## UNIT-1 Introduction

Structure of Mobile Computing  
Applications

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# Structure of Mobile Computing (MC) Applications

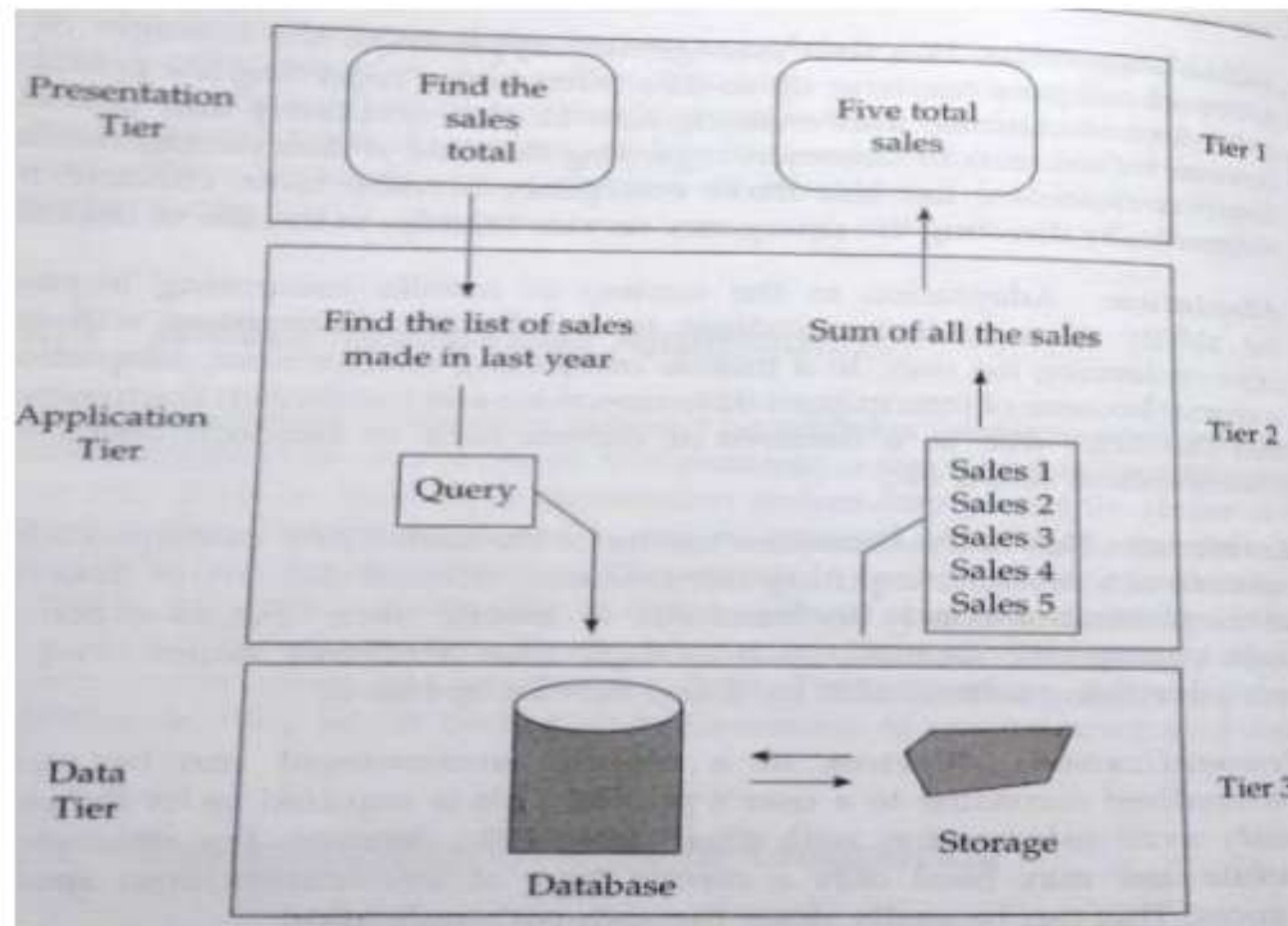
- MC applications are **structured** based on **there functionality**.
- It has 3 tiers:

Presentation (Tier 1)
Application (Tier 2)
Data (Tier 3)

- The three tier structure of the mobile computing applications



## Functionalities Provided by each tier structure of a mobile computing application



# Presentation tier

- Topmost tier concerns **user interface**
- Good User interface-Provides way to issue **request and responds in a meaningful way.**
- Program runs on the **client side.**
- Needs **web browsers, client programs.**



# Application Tier

- Responsibility of making **Logical Decisions** and **calculations**.
- Process data between **presentation** and **data layers**.
- Performs processing of **user inputs**, **obtaining information** and **making decisions**.
- This layer is implemented using **Java**, **.NET**, cold fusion etc.
- The implementation and functionalities provided by this layer should be **database independent**.
- Implemented on **fixed server**.



# Data Tier

- Data, Storage, access manipulation.
- Contains a **database**.
- Information stored and retrieved from the database.
- **Small amount of data** need to be stored , a **file system** can be used.
- Implemented on **fixed server**.



# Test your Knowledge

## 2G,3G, 4G

- 1) Services offered my mobile computing
  - a) Data
  - b) Voice
  - c) a and b



# Test your Knowledge

## 2G,3G, 4G

- 2) Voice Communications And Data Communications
  - a) Have the packets to arrive in order and they have to take the same short time to transmit
  - b) Have the packets need not arrive in order and they have to take the same short time to transmit
- 3) Why Voice Communications are cheap?
- 4) G stands for in 1G, 2G and 3G?





# Test your Knowledge

## 2G,3G, 4G

5) 1G networks started in

- a) 1980's
- b) 1970
- c) 1990
- d) 2000



1G

6) 1G networks were conceived and designed

- a) data service
- b) voice service
- c) a and b

**ssn**

# Test your Knowledge

## 2G,3G, 4G

- 7) 2G phone consumes
  - a) more power than 3G
  - b) Less power than 3G
- 8) Speed of 2G?
- 9) Speed of 3g?
- 10) Speed of 4G?
- 11) Speed of 5G?



# Test your Knowledge 2G,3G, 4G

Reference

<http://www.bmedia4tech.com/2013/10/19/110/whats-are-mobile-generations-compare-1g2g3g4g>

