# CS473 Mobile Device Programming

## FINAL EXAM – REVIEW

### Lessons included for Final Examination

Lesson – 8 –WebView, Shared Preferences and JSON
Lesson – 9 - Multimedia in Android
Lesson – 10 - SQLite Database
Lesson – 11 – Sensors
Lesson – 12 – Localization

**Course Resources :** www.online.cs.mum.edu

**Reading Resources  : Lecture PPT and** Demo Code

### Important points about Exam

1. The Final examination held on 12/14/2019 – Saturday Morning.

2. The exam will be timed. It will begin at 10.00 am and will end at 12:00 noon.

3. Final should be closed book.

4. Bring Pencil/Pen, Eraser and necessary things. You are responsible to keep your writing desk neat and clean. [ Use waste paper to keep the pencil sharpened dust].

5. Mobile should be in Silent or Swich off mode. You are not allowed to keep the mobile. So bring backpack to keep your belongings. Keep the backpack infront of the dias.

6. Necessary hints and API will be given in the question paper itself.

7. The final exam contains the following

   a. True or False

   b. Multiple Choice Questions

   c. Questions and Answer with clues

   d. Programming Pool Puzzle. Code will be given to you with blanks. Pool filled up with answers. You must choose the correct answer from the pool to fill the blanks.

   e. Programming Questions

      i. Lesson 8 - Shared Preferences (No need of passing objects using JSON, Gson)

      ii. Lesson 8- WebView(Refer – WebViewTest - No need to prepare for own webpage)

      iii. Lesson 11 - Sensors

**Review Questions**

**Lesson-8- Shared Preferences, WebView and JSON**

1. What is WebView?

2. How to work with WebView?

3. Useful methods from WebViewClient class.

4. Android storage types

5. Applications of Shared Preferences.

6. Steps for creating Shared Preferences.

7. What is JSON?

8. Need to know how to write given XML format date in to JSON format.

9. Use of Gson dependency.

10. What is POJO class and need of @SerializedName() annotation

**Lesson – 9-Multimedia**

1. Why do you need run time permissions?

2. Example for normal and dangerous permissions.

3. Pool Puzzle Programming Questions

    a. VideoView and MediaPlayer

    b. Camera Intents(Video Recording and Taking a Picture)

    c. Audio recording using MediaRecorder

**Lesson-10 – SQLite**

1. What is SQLite?

2. Need to know the purpose of API used in this lesson.

    Example : SQLiteDataBase, Cursor, SQLiteOpenHelper, ContentValues, Cursor etc.,

3. What is companion object in Kotlin?

4. Purpose of getWritableDatabase or getReadableDatabase methods.

5. CRUD Queries.

6. Firebase and its applications.

**Lesson – 11  - Sensors**

1. What are Motion, Environment and Position Sensors?

2. About Sensor Framework.

3. Sensor Implementation Template. (Slide number 7)

## Lesson – 12

1. What is Localization?
2. Why do we need Localization?
3. How strings.xml used for multiple languages?