

## Assignment 2

This assignment cover the topic from week 9 to week 14

### Purpose

To assess your ability to apply the course concepts and critical thinking skills

### Due Date:

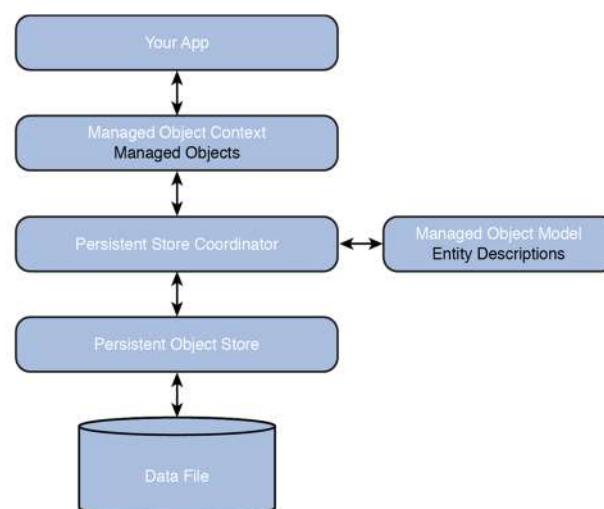
Week 15 - Saturday 12Des. 2015

### Action Items

#### Q1. (2 Marks)

**Explain the ways that we can follow to save data on iOS, use diagram to support your answer.**

- iOS enables saving data in files, either in regular text files or by archiving (what's known as serialization in Java and C#).
- iOS, apps are sandboxed, which means that each app is isolated from the other apps and from the operating system.
- One of the consequences is that each app has a simple file system that by default consists of a few standard directories: Documents, Library, and tmp. Developers store files in the Documents and tmp directories. The Documents folder is backed up when the device is backed up except tmp folder. By storing data in files, we can store user data.
- When you need to save a little bit of data in your app, the UserDefaults object is a very simple and easy way to do so. UserDefaults is a front-end to a key-value file (often referred to as Plist files because of the .plist extension) that is stored in the app's Preferences directory.
- Core Data provides support for a database-backed persistence solution for iOS apps. It is a data persistence solution developed by Apple to provide object-oriented storage.



**Q2. (2 Marks)**

**Write an Android app which will sense the room temperature.**

**Solution:**

```
public class SensorActivity extends Activity, implements SensorEventListener {  
    private final SensorManager mSensorManager;  
    private final Sensor mTemp;  
  
    public SensorActivity() {  
        mSensorManager = (SensorManager) getSystemService(SENSOR_SERVICE);  
        mTemp = mSensorManager.getDefaultSensor(Sensor.TYPE_TEMPERATURE);  
    }  
  
    protected void onResume() {  
        super.onResume();  
        mSensorManager.registerListener(this, mTemp, SensorManager.SENSOR_DELAY_NORMAL);  
    }  
  
    protected void onPause() {  
        super.onPause();  
        mSensorManager.unregisterListener(this);  
    }  
  
    public void onAccuracyChanged(Sensor sensor, int accuracy) {}  
}  
  
public void onSensorChanged(SensorEvent event) {}  
}
```

**Q3.(2 Marks)**

**Write the Cell identity Gsm and Carrier Configuration Manager Class code.**

**Solution:**

- a)     extends Object  
       implements Parcelable

```
java.lang.Object  
↳ android.telephony.CellIdentityCdma
```

- b)     extends Object

```
java.lang.Object  
↳ android.telephony.CarrierConfigManager
```

**Q4. (2 Marks)**

**Discuss the functionality of the following files in iOS application:**

- a) **AppDelegate.h and AppDelegate.m**
- b) **Main.storyboard**
- c) **ViewController.h and ViewController.m**

**Answer:**

- a) **AppDelegate.h and AppDelegate.m**—The App Delegate files manage issues related to the entire app and are primarily used to manage the life cycle of the app—how it is started, what happens when it goes to the background, and so on.
- b) **Main.storyboard**—The storyboard is used to design the interaction between multiple screens in your app as well as designing the layout of the individual screens.
- c) **ViewController.h and ViewController.m**—The view controller contains the code that controls the user interactions with the app. The header file contains the definitions required, while the Method file contains the coding for method describing the user interaction with the app.

**Q5. (2 Marks)**

**What kind of app do you want to make? Who is the target audience? How will you monetize it? Why would somebody want your app? How difficult would it be to make?**

**You will give the points to student if she/he answer all parts of the questions.**

**Submission Instructions**

Complete and submit this assignment per your professor's instructions.

**Grading Criteria**

Accuracy and completion of assignment: 0 - 5 points (10 Marks divided by 2)