

Lecture 1 – Introduction to Mobile Application

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Outlines

- Prerequisite course
- Assessment plan
- Market Share iOS/Android
- Introduction to Mobile Application
- Designing Mobile Application Contents
- Creating project
- Lab Exercises
- Mini Projects
- Any Questions?



IN THE BEGINNING MOTOROLA DYNATAC 8000X



EARLY SMART PHONES

IBM Simon



Nokia 9000 Series

WHAT IS A “SMARTPHONE”

- Semi-Smart: Phone that offers features beyond making calls
 1. E-mail
 2. Take pictures
 3. Plays mp3
 4. ...
- Phone that runs a complete Operating System
 - Offers a standardized platform for development
 - Able to execute arbitrary 3rd party applications



QUICK FACTS

- Today
 - Cell phones in use today ~ 7.95 billion
 - Smartphones account for 14% ~ 170 Million



MOBILE DEVELOPMENT SOLUTIONS

- Java ME
- Symbian
- UIQ
- S60
- Android
- BlackBerry
- OVI
- Windows Mobile
- iPhone
- LiMo
- Ångström distribution
- Adobe Flash Light
- BREW
- OpenMoko
- Palm OS (Garnet OS, Cobalt OS)
- Palm webOS
- Mojo



COMMON PROBLEM: ABSTRACTION

- Interface / GUI
 - How does the developer create an interface
 - Different interaction techniques
 - Graphical capabilities of the phone
- Phone Services and Security
 - What resources are available to your program
 - What types of boundaries or constraints are put on applications
 - How can code be considered “safe”



THREE TIERED SOLUTION

- Virtual Environment
 - Java ME
 - BREW *
- Core Operating System
 - Symbian
 - LiMo
- Rich Operating System
 - Android
 - iOS

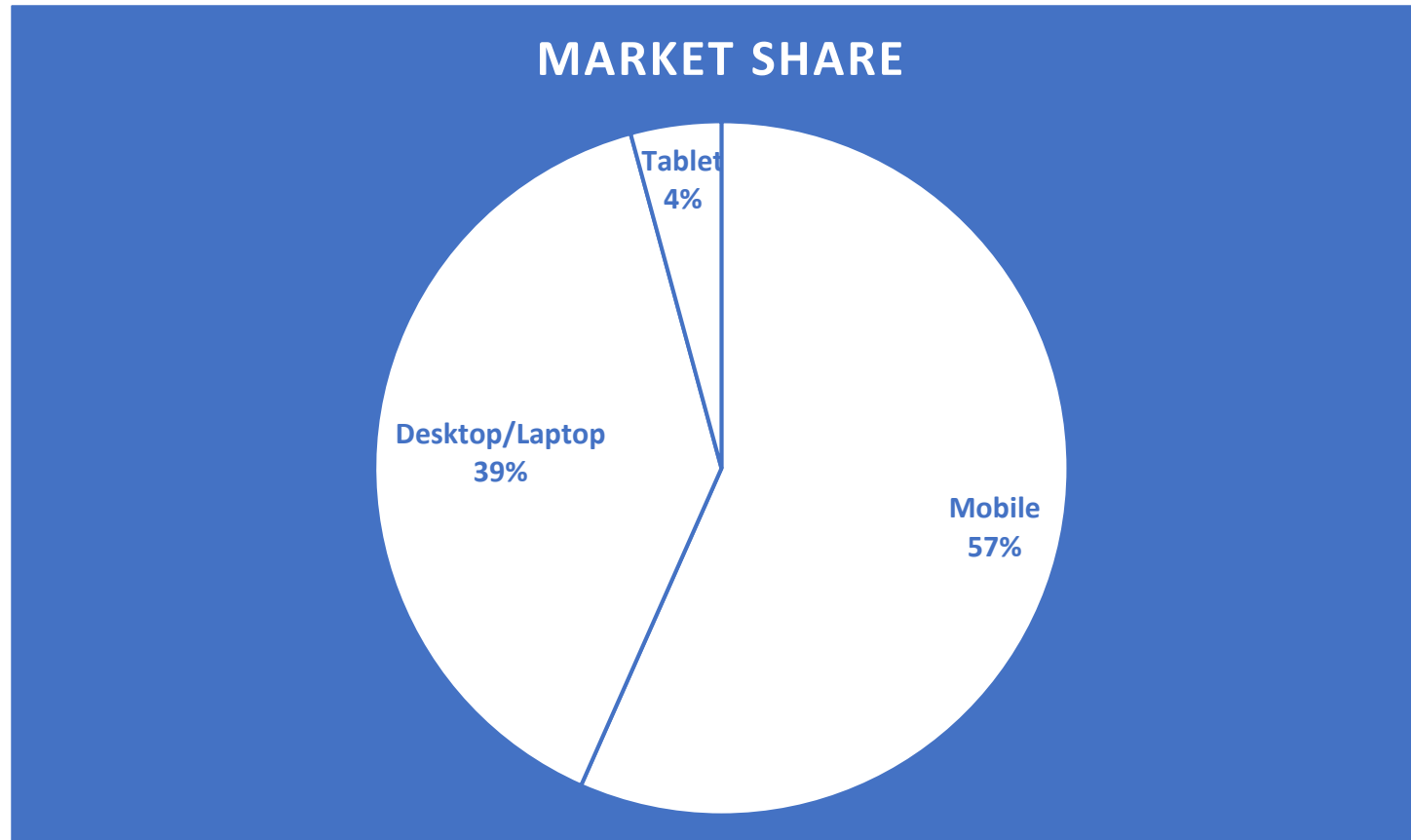


Android vs iOS

- iOS 28.26%
- Android 71.24%
- Other 0.5

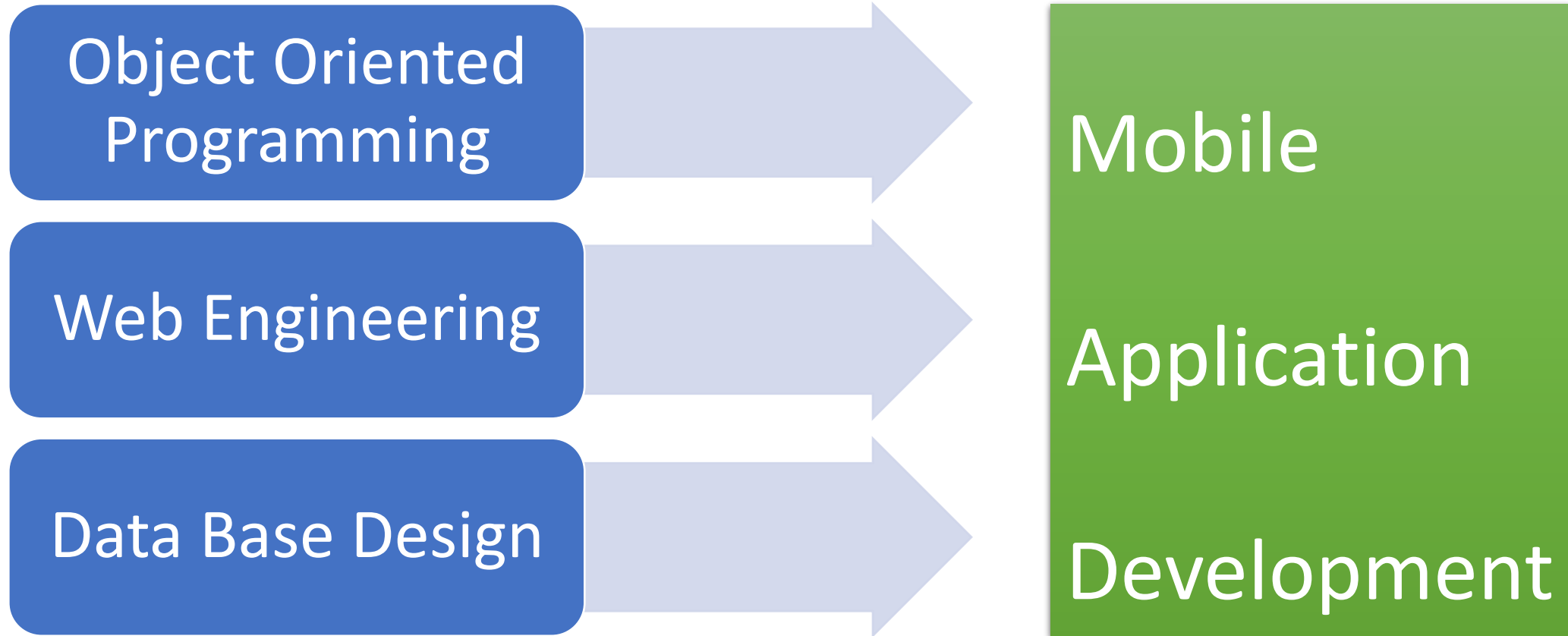


Device Types



- Source: netmarketshare

Prerequisite Course

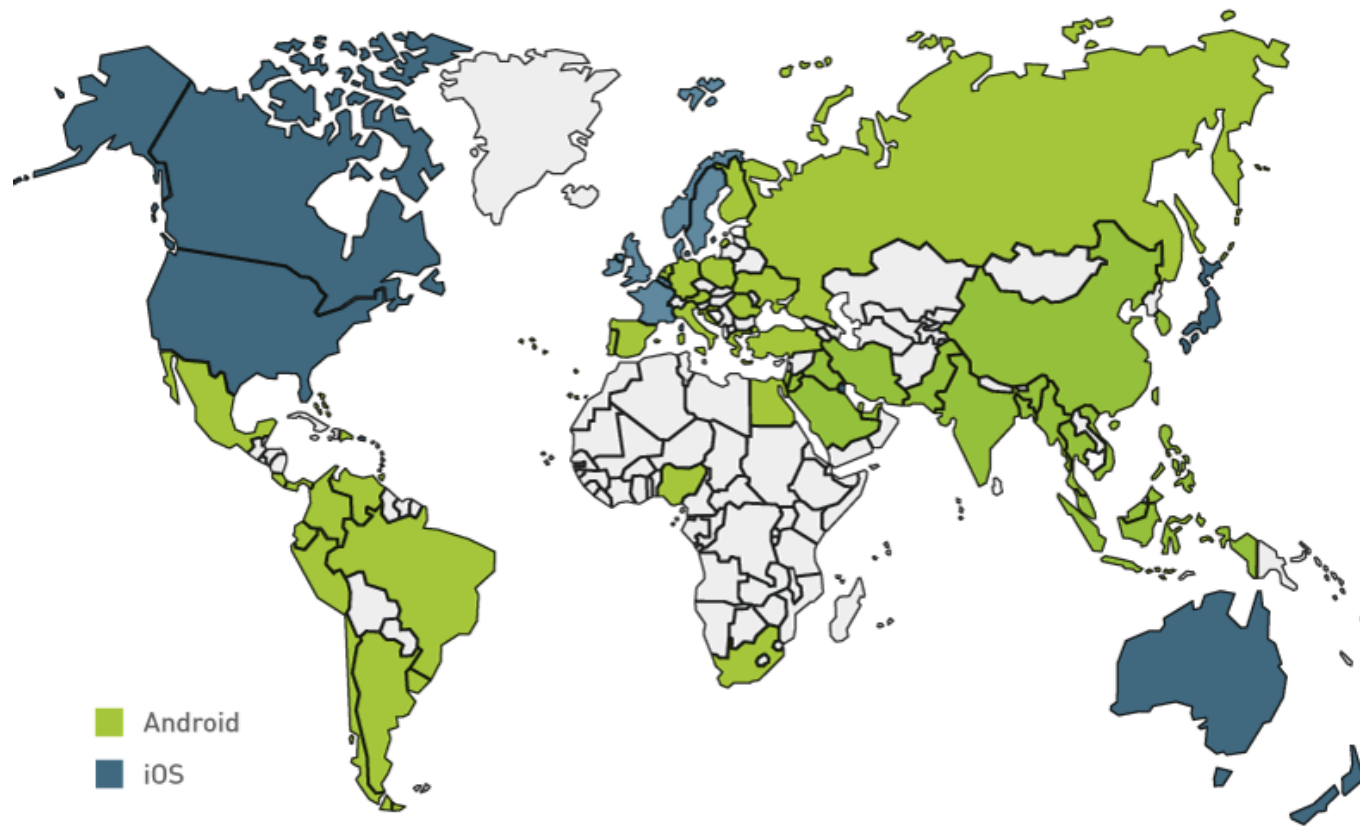


Assessment plan

	Semester-2			Final Exam	
	40%			60%	
	Theo.		Pract.	Theo.	Pract.
	25		15	45	15
Term Test	Quizzes & presentations & Activates & attendance	Term Test	Assignment		
20	5	10	5		

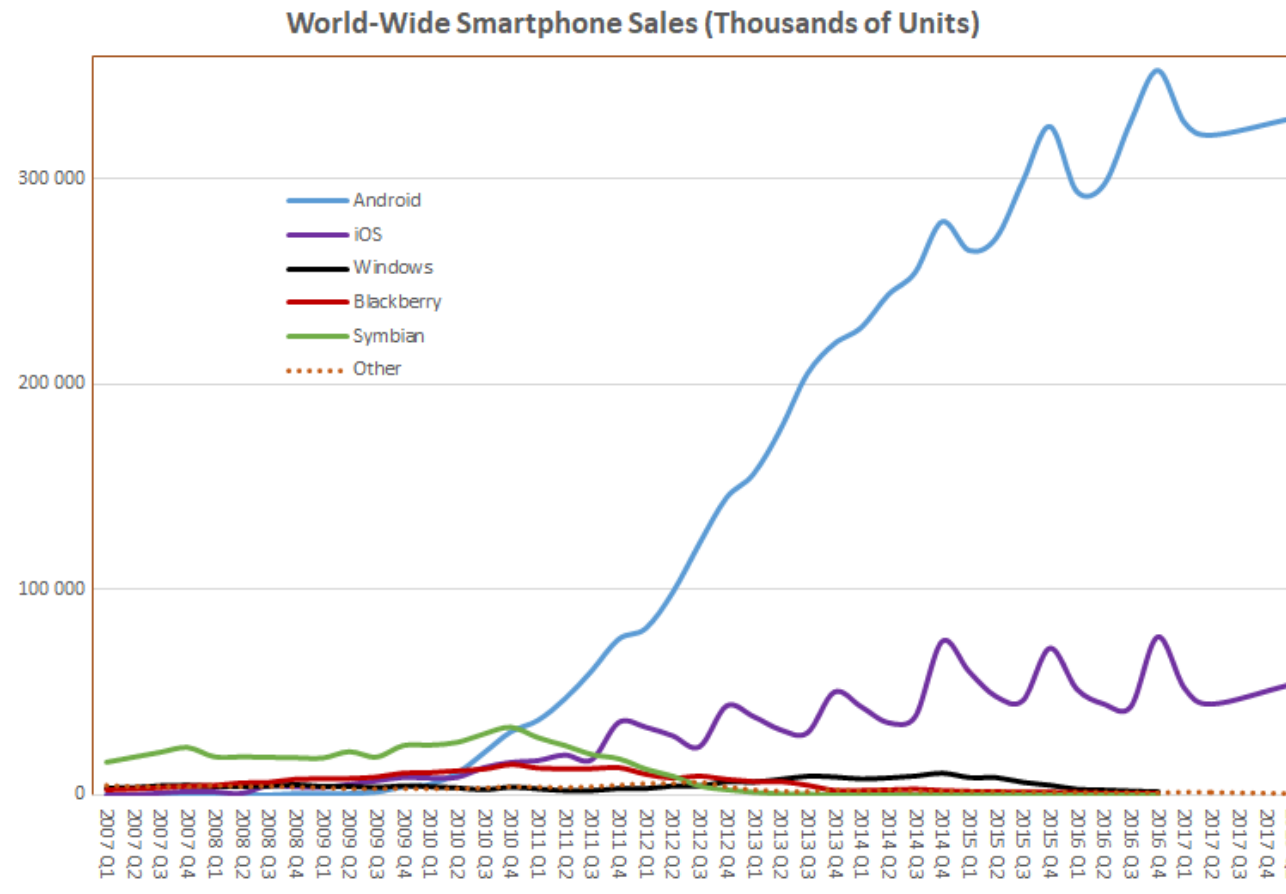


Market Share iOS/Android



Source : <https://lvivcity.com/android-vs-ios-app-development-platform>

Introduction to Mobile Application

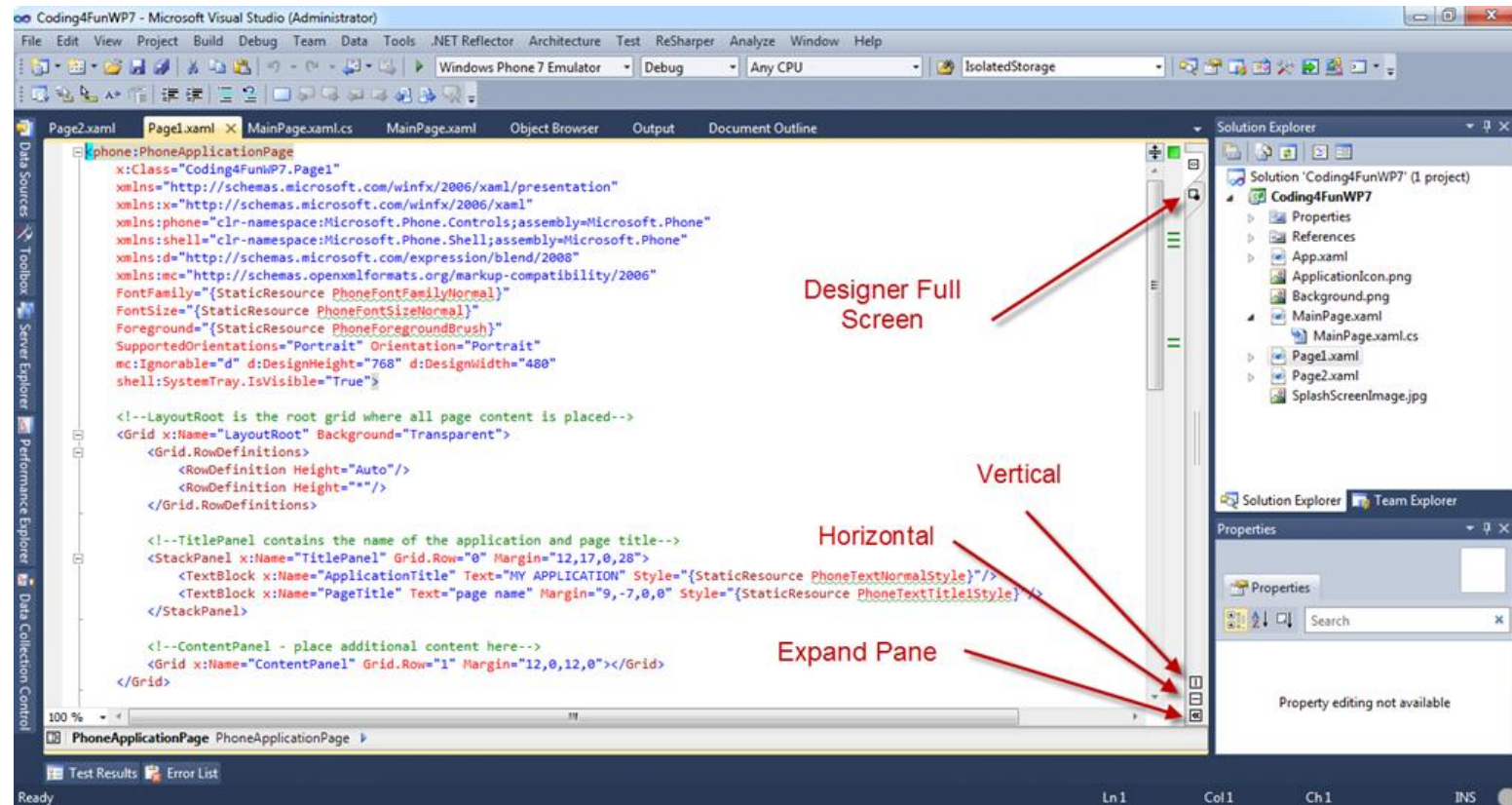


Source : https://en.wikipedia.org/wiki/Mobile_operating_system



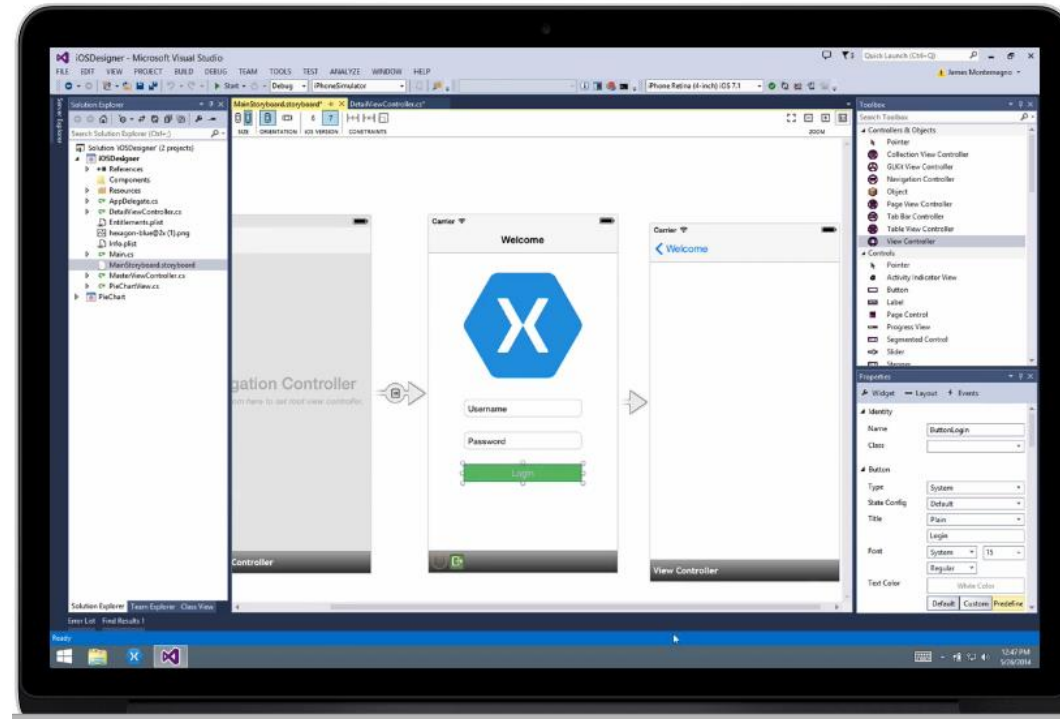
Designing Mobile Application Contents

- Aim: To learn how to designing a mobile application contents using XAML.



Creating project

- We will use Visual Studio to create Android/ IOS applications



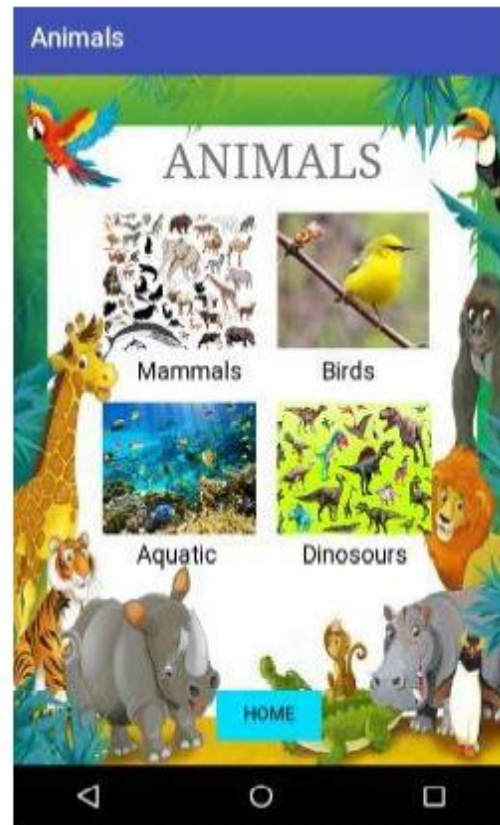
Lab Exercises



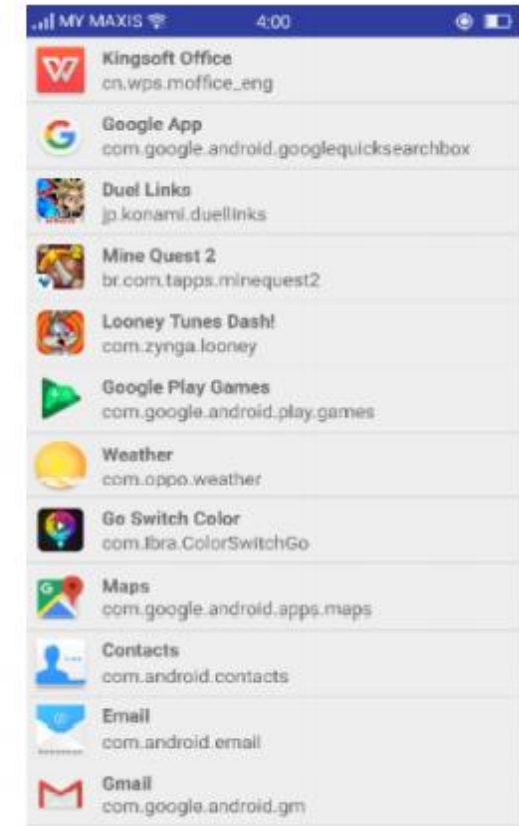
Mini Projects



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Any Questions?

