



Module # 2, [Complete] Mobile Programming certification course

Total Course Time	:	24 weeks
Total Training Fees	:	\$ 300
Payment Terms	:	\$ 300 Full one time payment or 3 easy installments of \$ 120 every 8 weeks.

The Complete Certification Course is aimed to provide a complete thorough understanding of various mobile technologies available for creating mobile applications. This course teaches three of the most popular technologies for Mobile phones. It deals with JavaME (J2ME), Python (Symbian) and C++ (Symbian) and helps the person to understand the complexities and processes for developing applications using these technologies.

Salient features of the course

- Web based interactive course is perfect for the working executives and full time students.
- Learn from the comfort of your home at any time of your convenience
- Work on live commercial projects
- Get certification / work experience for the full tenure of the course.
- You can Interact with our parent company's (Chakra Interactive) engineers and development team for better grasp of the concepts.
- Learn Symbian which is one of the sought after technologies by wireless companies.
- Weekend- Weekday contact program to enhance quick learning of the concept.
- Free text books and tutorials for reference

Content of the Content

1. Introduction to Mobile Phone Programming
 - (a) Evolution of the Mobile Phones, Networks, and Services
 - . Mobile Phone Family
 - . The Flexible Mobile Phone
 - (b) Wireless Technologies and Architectures
 - . Cellular Communication Systems
 - . Short-Range Communication Systems
 - (c) Mobile Application Deployment
2. Java 2 Micro Edition
 - (a) Java Family Overview
 - (b) J2ME Platform.
 - . Less Capable Devices: Targeting CLDC
 - . More Capable Devices: Targeting CDC
 - . Networking Support
 - . Optional Packages
 - . Java Technology Standardization
 - (c) Development Environment
 - . Java Development Kit.
 - . NetBeans IDE
 - . Eclipse IDE
 - . J2ME Plug in for IDEs
 - . Developing MIDP Applications for CLDC
 - . Developing CDC Applications
 - (d) Application Examples

- . Wireless Messaging API: Sending SMS
- . Mobile Multimedia API: Audio Player
- . Communication: Downloading Documents with GCF
- . XML Parsing: Parsing RSS

3. Python for Symbian Phones

(a) Introduction

(b) Python for S60 Installation and Resources

- . Software Installation on the Phone
- . Software Installation on the PC

(c) Writing a Python Script

- . How Python Runs Programs
- . Three Basic Steps
- . The First Script Example

(d) A Short Python Syntax Lesson

(e) Overview of Python for S60 Modules

(f) Modules – and How to Program Python for S60 Scripts

- . Messaging Module
- . Appuifw Module
- . Application Basics
- . Audio Module: Sound Recording and Playing
- . Variable Scope: Local, Global
- . Debugging
- . Inbox Module: Reading Incoming SMS
- . Graphics Module and the Use of Keyboard Keys
- . Image Composition Application

- . 3D Graphics: gles and glcanvas Modules
- . Camera Module
- . Video Download and Playing – the Use of Content Handler
- . File Upload to a URL
- . Mobile Photo Blogging Application
- . File Handling and Data Storing
- . Socket Module: Bluetooth, TCP/IP, and SSL
- . sysinfo Module
- . Location Module
- . Telephone Module .
- . Contact Module . .

(g) Creating Stand-Alone Applications

(h) Symbian Platform Security and Python for S60.

(i) Creating Python Extensions in C++

4. Symbian/C++

(a) Introduction.

(b) Setting up the Environment

- . Additional Installation Requirements
- . Overview of the SDK
- . Overview of the Carbide.c++ Express IDE 1.1

(c) SymbianOS in a Nut shell

- . Naming Conventions
- . Exception Handling and Resource Management
- . Descriptors
- . Active Objects

(d) Wireless Communication Technologies.

. Using TCP/IP

. Bluetooth OBEX, SMS, and Email

5. Mobile Fragmentation and Porting

(a) Mobile Fragmentation causes and solutions

(b) Smart Porting techniques

(c) Introduction to porting tools

(d) Creation of a porting tool

6. Industrial Project

(a) To create a project in company with a group of Industry professionals.