This course supports the assessment for Mobile Applications Development. The course covers 7 competencies and represents 3 competency units.

Introduction

Overview
Mobile application development has boomed in recent years. The world is moving in a direction where a mobile application is as necessary for a business today as a website was 5 years ago.

The Mobile Applications Development course will introduce you to programming for mobile devices. Utilizing your previous knowledge of programming, you will learn how to build a basic mobile application, build a mobile application using a graphical user interface (GUI), adapt applications to different mobile devices, save data, execute and debug mobile applications using emulators, and deploy a mobile application.

Note: The learning resource in this course uses Android Studio as the IDE for developing Android projects.

Getting Started

This course is assessed by the successful completion of a performance assessment, the bulk of which entails your creation of a unique mobile app. It would be a great idea to go check out the requirements for your performance assessment before you begin interacting with your learning resource material. Your learning will take place primarily with the use of videos tutorials delivered through Lynda.com. You will also have access to additional reference material via web tutorials and readings. Both your primary resources and your reference materials include learning activities; you should experiment with these! They will help you build your subject fluency and competence by providing you with the opportunity to practice coding, as well as help you gauge your learning as your progress. You might also consider working on your performance assessment tasks as you are going through the learning resources provided to you.

Pacing
This project for this course is lengthy and demanding. It is appropriate to expect that your project will take you at least a month to complete. Your time spent going through the course material will vary, depending on the time you spend completing learning resource activities and practicing the necessary skills, but the video tutorials themselves are only about 8 hours total. Don't spend more than a month with your learning resources and corresponding practice opportunities.
Course Welcome Video

Competencies
This course provides guidance to help you demonstrate the following 7 competencies:

- **Competency 4026.1.1: Introduction to Mobile Development**
  The graduate explains mobile development, develops a simple mobile application using the IDE, documents debugging the mobile application, and describes how to use an emulator.

- **Competency 4026.1.2: Activity Lifecycle**
  The graduate describes the Activity lifecycle in the mobile application, and creates and links an activity.

- **Competency 4026.1.3: User Interfaces and Handling User Input**
  The graduate creates a user interface and describes how to handle user input.

- **Competency 4026.1.4: Saving Data**
  The graduate explains ways to save data in a mobile application, and creates a database in a mobile application.

- **Competency 4026.1.5: Sharing Information**
  The graduate explains how to share information in mobile applications and creates a user-defined content provider.

- **Competency 4026.1.6: Supporting Different Devices**
  The graduate describes how to utilize the available hardware and services available in different devices.

- **Competency 4026.1.7: Deploying Mobile Application**
  The graduate describes mobile application deployment and prepares and application for deployment.

Course Instructor Assistance
As you prepare to demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you’re studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don’t work out on your first try, course instructors act as a support system to help you prepare for another attempt. You should expect to work with course instructors for the duration of your coursework, and you are encouraged to contact them as soon as you begin. Course instructors are fully committed to your success!
Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources
The learning resources listed in this section are included in this course.

- Lynda.com videos:
  - Developing Android Apps Essential Training with David Gassner
  - Building a Note-Taking App for Android with David Gassner

- Android Application Development: A Beginner's Tutorial by Budi Kurniawan, Brainy Software Corp. © 2015 (364 pages) Citation ISBN:9780992133016 (Available to WGU students from Books 24 X 7)

- Android Developer Tutorials

Mobile Application Development

Welcome to the exciting and rapidly changing world of mobile development!

Mobile Development
This course will help you get a jump start by teaching you the fundamental principles and programming techniques you'll need to develop applications for the Android operating system. You will also be able to demonstrate your competency by building your very own robust mobile app!

Let's Get Started!

Course Material

For step-by-step instructions on how to build an Android app, complete the following Lynda.com course. It is about 5 hours and 20 minutes to view the material, longer to complete the associated activities. During the course you will set up a development environment, prepare virtual and physical devices for testing, and have the opportunity to create a shopping app for a fictional sportswear company.

- Developing Android Apps Essential Training

When you have finished this course, complete the 2.5 hour Lynda.com course specific to building a note-taking app. Here you will learn to customize design themes and create a data
management layer allowing you to create, read, update, and delete notes.

- Building a Note-Taking App for Android

Reference Material

The next two resources are not required, but are helpful reference material.

- Android Application Development: A Beginner’s Tutorial (This e-text has some great sections on working with pictures and setting up notifications and alerts!)
- Android Developer Tutorials (The Android Developer Tutorials link is regularly updated with the latest and greatest of the most recent iterations of Android!)

Final Steps

Congratulations on completing the activities in this course! This course has prepared you to complete the assessments associated with this course. If you have not already been directed to complete the assessments, schedule and complete your assessments now.