SECTION I

SUBJECT AREA AND COURSE NUMBER

COMP 647

COURSE TITLE

MOBILE APP PUBLICATION

TYPE COURSE

NON-FEE   VOCATIONAL

CATALOG COURSE DESCRIPTION

This course introduces students to features of cross-platform mobile application development and the publishing process. Students will learn about JavaScript Object Notation (JSON) and NoSQL-style databases. Students will be introduced to various third-party application stores, learn how to create developer accounts, publish applications, and market applications to a global audience. (FT)

LECTURE/LABORATORY HOURS

28

ADVISORY

Mobile Software Dev Platform

RECOMMENDED SKILL LEVEL

Possess a 10th grade reading level; ability to communicate effectively in the English language; knowledge of math concepts at the 8th grade level and basic computer literacy.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
   SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
   SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
    SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
    SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

1. Introduce JavaScript Object Notation (JSON).
2. Introduce the NoSQL database paradigm.
3. Illustrate how to capture user input via forms.
4. Illustrate how to create an Application Developer account.
5. Illustrate how to publish to application stores.
6. Illustrate the use of Social Media Marketing
7. Illustrate preparing an application for Version 2.0 updates.

COURSE OBJECTIVES

Upon successful completion of this course, the student will be able to:

1. Set up an Application Developer account.
2. Create a NoSQL database.
3. Apply JSON principles on database documents.
4. Apply styling to tables.
5. Construct a system for user input.
6. Construct a store listing.
7. Test applications via A/B Testing.
8. Test market demand via social media.

SECTION II

COURSE CONTENT AND SCOPE

1. Advanced Features
    1.1.   User Input
    1.2.   Databases
    1.3.   Sharing
    1.4.   Publishing
    1.5.   Marketing
2. JavaScript Object Notation (JSON)
    2.1.   Plain text
    2.2.   Key/value pairs
    2.3.   Objects in curly braces
    2.4.   Arrays in square braces

COURSE CONTENT AND SCOPE (CONTINUED)

    2.5.   Storing data
        2.5.1.   JSON objects
        2.5.2.   JSON arrays
    2.6.   Retrieving Data
        2.6.1.   From a string
        2.6.2.   From a file
        2.6.3.   From a web server
3.   NoSQL
    3.1.   Choosing a solution
        3.1.1.   Offline vs online storage
        3.1.2.   Document paradigm
    3.2.   Database operations
        3.2.1.   Create
        3.2.2.   Destroy
        3.2.3.   Sync
        3.2.4.   Replicate
    3.3.   Document operations
        3.3.1.   Create/destroy document
        3.3.2.   Fetch document
        3.3.3.   Update document
        3.3.4.   Revisions
        3.3.5.   Events
4.   User-Generated Data
    4.1.   Input
        4.1.1.   Forms
        4.1.2.   Text
        4.1.3.   Number
        4.1.4.   Buttons
    4.2.   Output
        4.2.1.   Tables
        4.2.2.   Headings
        4.2.3.   Rows
        4.2.4.   Cells
        4.2.5.   Dialog boxes
    4.3.   Updating data
        4.3.1.   Change
        4.3.2.   Delete
    4.4.   Sharing
        4.4.1.   Email
        4.4.2.   Social media
5.   Application Publishing
    5.1.   Pre-flight check
    5.2.   Developer certificates
    5.3.   Compile with developer certificate

COURSE CONTENT AND SCOPE (CONTINUED)

6. Developer Accounts
    6.1. Application stores
    6.2. Set up
    6.3. Monetization
7. Application Listing
    7.1. Text assets
        7.1.1. Application title
        7.1.2. Short description
        7.1.3. Long description
        7.1.4. Feature list
    7.2. Graphical assets
        7.2.1. Icons
        7.2.2. Screenshots
        7.2.3. Videos
8. Application Testing
    8.1. Group beta testing
    8.2. A/B testing
9. Publishing
    9.1. Application store terms of service
    9.2. Application store review process
    9.3. Submitting applications
    9.4. Dealing with rejection
10. Publicizing Applications
    10.1. Social media
    10.2. Reviews/testimonials
    10.3. Answering user feedback
11. Application Updates
    11.1. Feedback
    11.2. Preparing for version 2.0
    11.3. Testing
    11.4. Publishing

APPROPRIATE READINGS

Appropriate readings may include, but are not limited to, periodicals, magazines, instructor-written materials, manuals, instructor selected URLs, and publications related to mobile application development.

WRITING ASSIGNMENTS

Appropriate writing assignments may include, but are not limited to, preparing text for an assigned project, keeping a journal on all laboratory and project work, and completing all assigned reports.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, reading texts and reference resources; research as needed to complete projects; and organizing and preparing written answers to assigned questions.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to, analysis and evaluation of assigned text and reference resources, and utilize this analysis in classroom discussions, writing assignments, and in performing laboratory activities. Students must select and use appropriate methods and resources to complete laboratory assignments.

EVALUATION

A student's grade will be based on multiple measures of performance and will include evaluation of student's ability to:
1.   Perform in a variety of activities and assignments.
2.   Complete written and practical examinations.
3.   Contribute to class and group discussions.
4.   Maintain attendance and punctuality per current policy.
5.   Demonstrate ability to work independently and as a team member.

Upon successful completion of each course in the program, a Certificate of Course Completion will be issued. Upon successful completion of all courses included in the program, a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction may include, but are not limited to, lectures, discussion, hands-on demonstrations, computer-assisted instruction, laboratory assignments and field trips. This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

Mobile App Marketing and Monetization, Genadinik, CreateSpace Publishing, current edition
Web Resources: http://json.org, http://pouchdb.com; Supplies: Journal (composition book), USB Drive or other storage media

PREPARED BY: Victor Campos and Richard Gholson   DATE: 11/24/2015

REVISED BY: _____   DATE: _____
Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:
San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog