FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT

Computer Science: Creating Apps

Board Approval Date: January 18, 2024	**Course Length: 1 Semester**
Grading: A-F	**Credits: N/A**
Proposed Grade Level(s): 6, 7, 8	**Subject Area: Elective** **Elective Area (if applicable):** **Computer Science**
Prerequisite(s): **None**	**Corequisite(s):**
CTE Sector/Pathway:	
Intent to Pursue 'A-G' College Prep Status: No	
A-G Course Identifier:	
Graduation Requirement: No	
Course Intent: **Program (if applicable):**	

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Donald Ogden, Associate Superintendent – Human Resources, Title IX Coordinator (Employees) & Equity Compliance Officer
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COURSE DESCRIPTION:

The course Computer Science: Creating Apps serves as an introduction to the realm of computer science and the fundamental principles of computational thinking, primarily focusing on the creation of mobile applications. Students are encouraged to unleash their creativity and innovation while collaboratively conceiving and building mobile solutions for real-life challenges. Through this process, students witness the positive impact of implementing computer science in society and across various disciplines, with a particular emphasis on the intersection with biomedical science.

DETAILED UNITS OF INSTRUCTION:

Unit Number/Title	Unit Essential Questions	Examples of Formative Assessments	Examples of Summative Assessment
1. Getting Started with Apps	How do you use App Inventor to produce an app? What are the main components of App Inventor? What is algorithmic thinking and why is it important to software development?	Basic counting app using buttons, labels, and text boxes for display/interface and utilizing variables to output collected data.	Flowchart outlining an app planned and created by student Completed simple app utilizing effective interface, graphic elements, and variables.
2. Games R Fun	How can a developer break a complex task into a sequence of small steps? How can a developer analyze a program to reduce redundant lines of code? How does the concept of abstraction simplify complex processes? How does a developer store and access data in lists?	Simple app utilizing functions to reduce redundancy Simple app utilizing lists of stored values	Culminating game app that pulls phrases from a list and expects the user to identify the author of the quote. App uses functions.
3. Who would have Thunk it?	What does each of the Model-view controller layers do? How does a developer update data stored in lists? How do conditional statements control an app's choices?	simple apps utilizing conditional statements to control output	Interactive app that gathers data from user and provides feedback based on input.

ESSENTIAL STANDARDS:

https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf
Standards for Mathematical Practice
1) Make sense of problems and persevere in solving them.
2) Reason abstractly and quantitatively.
5) Use appropriate tools strategically.
6) Attend to precision.

RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

Link to Common Core Standards (if applicable):
Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.
https://www.cde.ca.gov/be/st/ss/documents/finalelaccssstandards.pdf
https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf

Link to Framework (if applicable):
Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

Link to Subject Area Content Standards (if applicable):
Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.
California Career Technical Education ICT Model Curriculum Standards C3.0 Create effective interfaces between humans and technology. C4.0 Develop software using programming languages. C5.0 Test, debug, and improve software development work.

Link to Program Content Area Standards (if applicable):
Program Content Area Standards applies to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

TEXTBOOKS AND RESOURCE MATERIALS:

Textbooks

Board Approved	Pilot Completion Date (If applicable)	Textbook Title	Author(s)	Publisher	Edition	Date

		N/A				

Other Resource Materials
Teacher created instructional materials.

Supplemental Materials
Board approved supplemental materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.):
N/A