

Creating Mobile Apps Unit 1: Creating Simple Mobile Apps

Stage 1 Desired Results		
ESTABLISHED GOALS: <u>Competencies:</u> - Students will demonstrate the ability to compare and discuss the effects of computing on society in order to improve current technology practices. - Students will demonstrate the ability to design or improve software in order to respond to events. - Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials. - Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences. - Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style. <u>Content Standards:</u> CSTA - Computer Science Teacher Association <u>CSTA 3A-A-5-4</u> - Design, develop, and implement a computing artifact that responds to an event (e.g. robot that responds to a sensor, mobile app that responds to a text message, sprite that responds to a broadcast). <u>CSTA 3A-A-5-5</u>: Use user-centered research and design techniques (e.g., surveys, interviews) to create software solutions. <u>CSTA 3A-C-7-13</u>: Develop and apply criteria (e.g., power consumption, processing speed, storage space, battery life, cost, operating system) for evaluating a computer system for a given purpose (e.g., system specification needed to run a game, web browsing, graphic design or video editing). <u>CSTA 3A-I-1-26</u>: Compare and debate the positive and negative impacts of computing on behavior and culture (e.g., evolution from hitchhiking to ride sharing apps, online accommodation rental services).	Transfer	
	Students will be able to independently use their learning to to create products that are easy for others to use.	
	Meaning	
	ENDURING UNDERSTANDINGS Students will understand that... - mobile applications may be created on various software platforms. - mobile applications may run on devices that vary in size - the operating system running on the target device determines the development platform	ESSENTIAL QUESTIONS - Is there really an “app for that”? - What separates the good apps from the great ones?
	Acquisition	
	Students will know... - that an application will respond to an event. - that a solution may use data from one or more data sources. - that specific language syntax is used when successfully solving problems. - that testing applications decrease the number of problems in it. <u>vocabulary</u>: application, behavior, branching, button, component, decision, development environment, display, input, label, mobile device, repetition, screen, textbox	Students will be skilled at... - designing, developing, and implementing a computing artifact that responds to an event. - using user-centered research and design techniques to create software solutions. - creating computer applications. - responding to the needs of others through design. - conducting user/consumer research for design input, ideas, and feedback. - identifying the impact of an app on behavior and culture. - identifying the systemic criteria needed to install and run an app.
Content Area Literacy Standards		21st Century Skills
RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>. WHST.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. WHST.11-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.		- Think Creatively - Implement Innovations - Create Media Products - Solve Problems

Stage 2 - Evidence

<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

<i>Language Arts Integration</i>	<i>Mathematics Integration</i>
1.OA.1 Use	1.OA.1 Use
<i>Technology Integration</i>	<i>District Materials</i>
1.OA.1 Use	