LT. GOVERNOR'S COMPUTING CHALLENGE - CODING FOR GOOD:

www.ltgovcc.org

Connecticut students in grades 3 through 12 are challenged to identify an issue and propose a computing solution that embraces the theme of Coding For Good. There are three different challenges from which you can choose.

- The Concept Challenge
- The Prototype Challenge
- The Development Challenge

"HOW TO" - CONCEPT CHALLENGE

A Guide To A Successful Submission for The Lt. Governor's Computing Challenge

TABLE OF CONTENTS

STEP 1: SELECTING A CHALLENGE

STEP 2: IDENTIFYING A PROBLEM

STEP 3: BRAINSTORMING

STEP 4: IDENTIFYING A COMPUTING SOLUTION

STEP 5: CREATING AUDIO-VISUAL | VIDEO | ANIMATION

STEP 6: PREPARING & SUBMITTING YOUR WORK

STEP 7: EVALUATING THE COMPUTING SOLUTION

STANDARDS: Use the links below to view standards for each step of the Concept Challenge.

CSTA STANDARDS K-5 | CSTA STANDARDS 6-12 | ISTE STANDARDS | AASL STANDARDS



Have questions? Visit the Resources Page or Email info@ltgovcc.org.

STEP 1: SELECTING A CHALLENGE

- 1. Organize a team up to 5 students or decide to work independently
- 2. Determine which challenge you want to enter.
- 3. Not sure which challenge? Use these tools to help you decide:
 - Overview of the Challenges
 - Flowchart Infographic
 - Detailed Explanation of Each Challenge
- 4. If you decide the Prototype or Development Challenge is the right challenge for your team, go to the Resource Page to access the "How To" Guide for the Prototype and Development Challenge.
- 5. If you decide to join the Concept Challenge, keep reading.

STEP 2: IDENTIFYING A PROBLEM

- 1. Consider the Challenge theme "Coding for Good."
- 2. Discuss what it means to Inspire Health & Wellness for All.
- 3. Identify a societal problem that your team would like to address in this challenge.
- 4. To help with this, ask yourself:
 - a. What area of health and wellness do I find interesting? [physical, mental, social, emotional]
 - b. What group(s) of people need(s) to improve health and wellness?
 - c. What keeps people from getting or staying healthy?
 - d. What do I want to change in my school, town, state or the world?
- 5. Brainstorm ideas to identify a problem your team wants to solve.

STEP 3: BRAINSTORMING

Brainstorming is an effective process to generate ideas. Use brainstorming sessions to identify a societal problem your team wants to address in this challenge and to identify a computing solution to solve this problem.

- 1. View these resources to understand the power and the process of brainstorming.
 - Why Brainstorm?
 - A Better Way to Brainstorm: How to Get Students to Generate Original Ideas
 - 4 Ways to Improve your Brainstorming
 - Six Creative Ways To Brainstorm Ideas
 - 10 Effective Brainstorming Techniques
- 2. Use these tools to track and guide your brainstorming sessions.
 - Google <u>Docs</u> or <u>Jamboard</u>
 - Mind Meister
 - Canva Mind Map
 - FigJam
 - Padlet
- 3. View additional guidance and resources from our archived webinars.



Have questions? Visit the Resources Page or Email info@ltgovcc.org.

STEP 4: IDENTIFYING A COMPUTING SOLUTION

- 1. With a problem clearly identified, brainstorm possible computing solutions.
- 2. To help with this, ask yourself:
 - a. What would be the best tool to solve this problem? [mobile app, website, wearable, video game...]
 - b. What features or functions will help solve the problem?
 - c. Will the user interact with the computing solution?
 - d. How can I make an enjoyable experience for the users of my computing solution?
- 3. Research your solution to broaden and enhance your ideas.
- 4. Additional Tip: Use Apple's App Design Journal to help guide the ideation process.

STEP 5: CREATING AUDIO-VISUAL | VIDEO | ANIMATION

- 1. The Concept Challenge requires an audio-visual to be submitted. Below are some online tools you can use to create your audio-visual.
 - Animaker: make animated videos online
 - Animoto: make videos with still images and text
 - PowToon: make animated videos online
 - Loom: record screen activity (Loom Tutorial)
 - Screencastify: record screen activity (<u>Screencastify Tutorial 1</u>) (<u>Screencastify Tutorial 2</u>)
- 2. When you take images or sounds from the Internet, you need to make sure they are OK to use and give credit to the source. Use the sites listed below to access images and sounds for your project.
 - Creative Commons: Watch this video to see how to use content from Creative Commons.
 - <u>Wikimedia Commons:Images</u>: Search for Image, Click to Enlarge, Click "More Details", Download the image, click the "show me how" link to cite the image.
 - Google Images Advanced Search: Select "Creative Commons licenses" under "usage rights" dropdown. Click the blue Advanced Search button and then type in your search terms.
- 3. Upload your audio-visual to YouTube or Google Drive.

STEP 6: PREPARING & SUBMITTING YOUR WORK

- 1. **Use** the document below to help plan and complete the team profile.
 - Concept Challenge Template (docx or Google doc)
- 2. Your team will need to complete the Google Form for your submission.
- 3. The form requires you to submit a link to your video, so be sure it has been uploaded to YouTube or Google Drive.

STEP 7: EVALUATING THE COMPUTING SOLUTION

- 1. After the closing date, your submission will be evaluated by educators and industry professionals.
- 2. Review the Concept Rubric to learn more about how your computing solution will be evaluated.



Have questions? Visit the Resources Page or Email info@ltgovcc.org.